TAA.

The SOUTHERN ECONOMIC JOURNAL

Volume XIII JANUARY, 1947 Number 3

CONTENTS

The Control of Rubber in World War II *Paul Wendt* 203

Collective Bargaining and Economic Theory *Werner Hochwald* 228

Revival of Free Labor Organizations in the U. S. Occupied Zone in Germany—A Preview *Samuel Liss* 247

Location of Potential Labor Reserves from Published Data *Arthur M. Whitehill, Jr.* 257

The Determination of Postwar Exchange Rates *Raymond F. Mikesell* 263

War and the Trade Orientation of Haiti *Giles A. Hubert* 276

Book Reviews 285

By Montgomery D. Anderson, Herbert von Beckerath, Truman C. Bigham, Martin W. Black, Jr., Gladys Boone, John B. McFerrin, E. C. Griffith, Ervin Hexner, J. R. Hodges, D. Clark Hyde, Albert S. Keister, Harold Kelso, Harold Emerson Klontz, John T. Masten, D'Alton B. Myers, Henry Oliver, Oreen M. Ruedi, Murray W. Shields, Joseph J. Spengler

State Reports 313

By H. H. Chapman, Albert Griffin, Robert B. Highsaw, T. Levron Howard, William H. Joubert, Karl D. Reyer, Glenn R. Smith, Rodman Sullivan, Herman P. Thomas, Francis E. McVay

Personnel Notes 330

Notes 339

Books Received 341

A JOINT PUBLICATION OF THE SOUTHERN ECONOMIC ASSOCIATION AND THE UNIVERSITY OF NORTH CAROLINA

Published Quarterly at Chapel Hill, N. C.

Volume XIII, Number 3 JANUARY, 1947

The SOUTHERN ECONOMIC JOURNAL

A JOINT PUBLICATION OF THE SOUTHERN ECONOMIC ASSOCIATION
AND THE UNIVERSITY OF NORTH CAROLINA

Published Quarterly at Chapel Hill, N. C.

The Southern Economic Journal is published four times a year, in January, April, July, and October, at Chapel Hill, N. C. The subscription price is \$3.00 per year, \$1.00 for single copies, and 75 cents each for back numbers prior to Vol. II, No. 3. A special rate of \$2.00 is granted to members of the Southern Economic Association.

All communications should be addressed to the Managing Editor, P. O. Box 190, Chapel Hill, N. C.

The articles in this *Journal* are indexed in *The International Index to Periodicals*, New York, N. Y.

Entered as second-class matter May 11, 1936, at the post office at Chapel Hill, North Carolina, under the act of March 3, 1879, section 520, P. L. & R.

Printed by the Waverly Press, Inc., Baltimore, U. S. A.

VOLUME XIII NUMBER 3

The SOUTHERN ECONOMIC JOURNAL

January, 1947

THE CONTROL OF RUBBER IN WORLD WAR II

PAUL WENDT

University of California

Military success of the United Nations in World War II was threatened by a rubber shortage. Japanese capture of the principal rubber producing areas of the Far East in 1942 eliminated the sources of 90 per cent of the world's natural rubber production. Military rubber requirements alone during the war years exceeded normal peacetime civilian use, while tires were required for over 30 million passenger cars, buses, and trucks used in civilian transportation of workers and war materials.[1]

To meet this emergency, Britain shared her last remaining source of Far Eastern natural rubber, Ceylon; the United States created a new synthetic rubber industry, the future of which was to become a major postwar problem; and a system of controls over rubber was evolved which included international and national allocations, consumption restrictions, and rationing of civilian rubber products.

This article describes the steps taken in the United States to solve the rubber problem in World War II and evaluates the program in terms of its success in achieving the following goals:

1. Insuring an adequate supply of natural rubber
2. Developing synthetic substitutes
3. Controlling the use of rubber.

I

The rise of Japan in the 1930's drew the attention of American and British military authorities to the necessity of acquiring a stockpile of rubber. These early efforts were encouraged in 1937–38 by the Rubber Manufacturers Association, anxious to assure continuing supplies of a vital material, and agricultural interests desiring to remove part of our large cotton surplus. An agreement was announced in April 1939, providing that the United States and United Kingdom would barter 500,000 bales of cotton for approximately 90,000 tons of rubber. These commodities were to be used for war emergency purposes only, the United Kingdom to secure the export of the rubber under the

[1] Automobile Manufacturers Association, *Automobile Facts and Figures, 1942–1945*, Detroit, Mich.; Charles L. Dearing, *Automobile Transportation in the War Effort;* Rubber Manufacturers Association, Inc., *Tires at War, 1939–44*.

IRRC (International Rubber Regulation Committee) scheme. Subsequent agreements in 1940 and 1941 between the Rubber Reserve Company, newly organized RFC subsidiary, and IRRC increased the total tonnage to 430,000 tons.

These early efforts resulted in the highest level of natural rubber imports in the nations's history during 1940–41. Although consumption also rose during this period, the stockpile reached an all-time peak of 533,000 long tons at the end of 1941. Arrivals during the first four months of 1942 raised stocks to 634,000 tons, a figure about equal to consumption for the year 1940. The great producing areas of British Malaya and the Netherlands Indies were lost to Japan in February and March 1942, and the only important producing area remaining, Ceylon, which had exported 88,000 tons in 1941, was threatened by the rapidly advancing Japanese. The total annual production for the year 1941 of the areas remaining to the United Nations in Africa, South America, and Mexico amounted to less than two weeks' current consumption for the United States alone.

Immediately after Pearl Harbor, the Rubber Reserve Company entered into an agreement with IRRC to purchase 100,000 tons of rubber per month during 1942.[2] Efforts were made to insure maximum flow of crude rubber from the producing areas in the Far East. The Combined Raw Materials Board recommended early in March 1942 that Ceylon rubber production for the next two months be allocated to Russia and to the United States.[3] It was also recommended that the United States should assume procurement responsibility in the Western Hemisphere and Liberia, responsibility for all other rubber-growing areas to be assumed by the United Kingdom, and that neither country would accept offers of rubber outside its sphere of influence.[4] These early recommendations were the foundation for later decisions and recommendations in the field of international allocations of rubber.

Agreements were negotiated between March and October 1942 with 15 Latin American countries providing that surplus natural rubber production would be shipped to the United States in return for a United States guarantee of their basic requirements for finished goods.[5] In early 1942, it was optimistically

[2] Memorandum of Agreement, Reconstruction Finance Corporation, Rubber Reserve Co. and International Rubber Regulation Committee, Dec. 13, 1941.

[3] Combined Raw Materials Board, Decision No. 5, March 3, 1942. Any rubber purchased by the United Kingdom in Ceylon during the next two months in excess of 12,000 tons allocated to Russia was to be shipped to the United States.

[4] Combined Raw Materials Board, Decision No. 16, March 26, 1942.

[5] The first agreement, with Brazil, March 3, 1942, was negotiated by the Rubber Reserve Co. with concurrence of the State Dept. The remaining 14 agreements were negotiated by the Board of Economic Warfare with State Dept. concurrence. In countries with manufacturing facilities, we agreed to furnish rubber. Other agreements were negotiated in 1942–43 with private contractors in the following countries: Costa Rica—Goodyear; Honduras, Guatemala, Salvador, Colombia—Chicle Development; Liberia—Firestone; Belgian Congo—Societe por la Producion de Caoutchouc (hevea planting); Haiti—SHADA (cryptostegia planting); Central American countries—Wm. Wrigley Co.; Mexico—Continental Mexican Rubber Co. (Mexican guayule planting). These contracts, which were to expire between March and Dec. 1946, were terminated by the Rubber Development Corporation

predicted by the Board of Economic Warfare and others that the Western Hemisphere natural rubber program would yield over 60,000 tons in 1943 and almost double that quantity in 1944.

The administrative organization carrying on the natural rubber program prior to the Baruch report was overlapping and confusing. The Rubber Reserve Company, through its buying committee, handled the procurement and storage of Far Eastern and other rubber acquired for the United States stockpile. Representatives were sent to Latin American countries early in 1942 to negotiate rubber purchase agreements. The Department of Agriculture had carried on field studies and experimental hevea rubber plantings in 15 Latin American countries with $500,000 approved by Congress in June 1940. Meanwhile administrative authority over the acquisition of materials from foreign countries was placed in the hands of the Board of Economic Warfare by Executive Order No. 8982 (December 27, 1941), which was later modified to leave over-all policy in the hands of the State Department, matters of "business judgment" in the BEW, and actual procurement in the hands of the Rubber Reserve Company. The Coordinator for Rubber in the WPB, after his appointment in March 1942, attempted to resolve the difficulties between BEW and Rubber Reserve, suggesting that the former agency confine its decisions to over-all policy. BEW, however, resisted any encroachment upon its authority over the rubber program and insisted that the Rubber Reserve Company clear every detail of the buying program with its Rubber Section. The fundamental conflict between the two agencies was over the question of whether the Latin American rubber program should have as a major emphasis the long-term planting and development program begun by the Department of Agriculture in 1940 or whether principal reliance should be upon maximum wild rubber procurement. It was a conflict between the businessman's approach to the problem and the economic planner's. The program which resulted was a poor mixture of the two.

The Baruch report, issued in September 1942, called attention to the failure to build a greater stockpile of natural rubber and recommended that: (1) a minimum stockpile of 100,000 long tons of natural rubber be maintained, (2) production of natural hevea rubber, guayule, and cryptostegia be pursued vigorously, (3) administrative responsibility over the rubber program be centralized in a rubber director.

The recommendations of the Baruch report on the natural rubber program removed earlier administrative confusion but added little to supplies. Following the report, the Rubber Development Corporation was formed as a new RFC subsidiary to carry on the work of BEW and the Rubber Reserve Company in Latin America, under the supervision of the rubber director (Chart I). Imports from the Amazon Valley increased in 1943 and 1944, but the results were

---

in 1945. Latin American rubber agreements with the exception of Bolivia, Ecuador, British Honduras, Salvador, Honduras, and Guatemala were extended from Dec. 31, 1946, until June 1947. The agreement with Venezuela was on an annual basis and will expire in Oct. 1946.—Report of the Special Director of Rubber Programs to WPB, June 25, 1945.

less than half of those estimated earlier by BEW and Rubber Reserve (Table 1). A presidential directive of July 15, 1943, transferred the responsibility for the activities of the Rubber Development Corporation to the Office of Economic Warfare, predecessor to the Foreign Economic Administration. No important change in policy resulted from this change, since it was generally assumed by this time that the Western Hemisphere natural rubber program would fall far below 1942 objectives.[6]

Seed and equipment were acquired, nurseries established, and approximately 53,000 acres of irrigated land leased in California under authorization of the Guayule Act (Public Law 473, March 5, 1942) by the spring of 1943. Following the Baruch report, an amendment to the act in October 1942 increased the authorized acreage to 500,000, of which 200,000 acres were to be in cultivation by June 1944. This, with subsequent plantings, was to allow an annual harvest of about 80,000 tons of rubber.[7] As a result of crop failures and farmer agitation to return the acreage to more profitable food crops, it was decided in March 1943, when only 31,356 acres were under lease and planted, to lease no additional land and maintain the nurseries in standby condition. Guayule plantings yielded only approximately 1,000 long tons of rubber in the three years 1943–45, and in 1945 the War Production Board decided to harvest by 1947 the entire guayule acreage planted, the total yield estimated at 12,000 tons of rubber. Finally, in March 1946, it was proposed in Congress that the entire acreage be ploughed under and the program ended by June 30, 1947.

Stocks of natural rubber and latex declined rapidly during 1943–44 and in October 1944 reached a low point of 90,590 long tons, below the Baruch Committee recommended minimum of 100,000 long tons. By this time monthly synthetic rubber production of 66,000 long tons exceeded current monthly consumption and synthetic stocks were being built up rapidly. Delays in military conversion to synthetics and a large increase in stated military requirements for 1945 gave new importance to increasing natural rubber supplies. To meet this need, increased quantities of Ceylon, Indian, and African rubber were allocated to the United States by CRMB. (United States natural rubber imports from November 1944–February 1945 totaled 60,364 long tons as compared with 35,691 long tons during the previous four months.) The reduction in stated military requirements with the changing course of the war early in 1945 and an accelerated rate of conversion to synthetics removed this new threat to exhaustion of natural rubber supplies and by December 1945 natural rubber stocks had increased to 118,715 long tons.

The maintenance of natural rubber supplies to the United States during the war can be attributed to:

[6] Office of Rubber Director, WPB, *Progress Report No. 4*, July 25, 1944. "Production from South America has been disappointing; today it appears to this office the prospects for 1945 are little or no brighter."

[7] "Guayule Production in the West," Federal Reserve Bank of San Francisco, *Monthly Review*, May–June 1945. Report of the Special Director of Rubber Programs to the War Production Board, June 25, 1945.

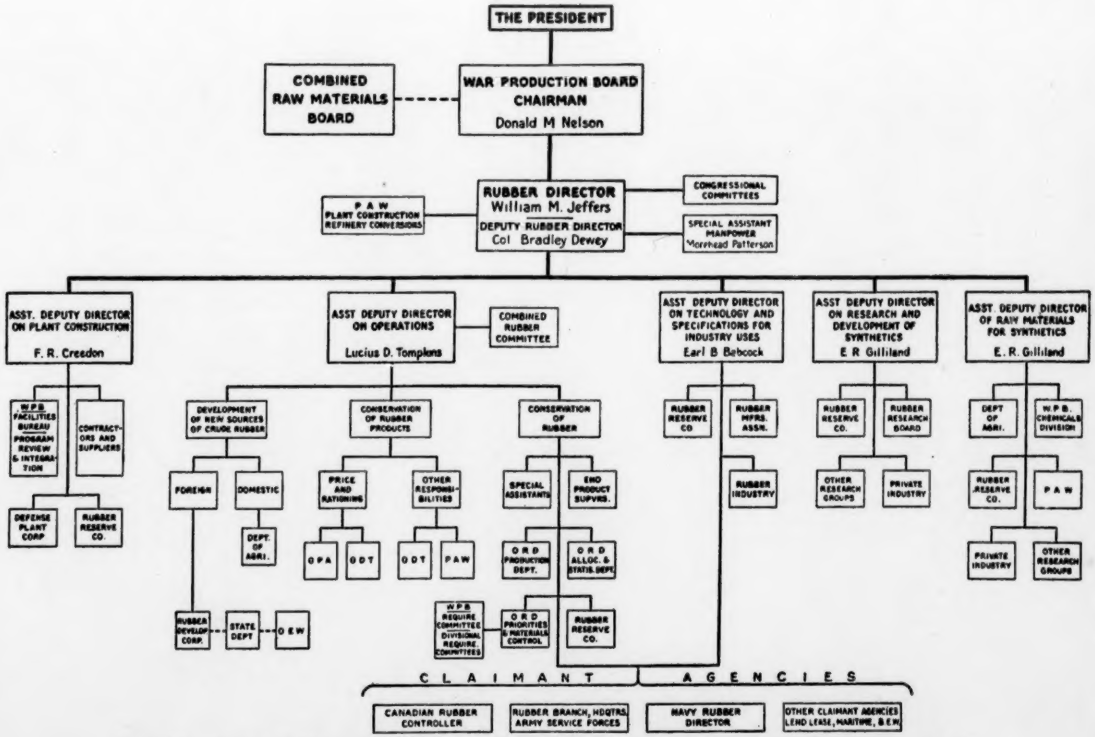

CHART I. AGENCIES CONCERNED WITH THE RUBBER PROBLEM UNDER THE RUBBER DIRECTOR—1943

1. Early and successful efforts of the rubber industry and government agencies, which during 1940–41 resulted in the highest level of natural rubber imports in the country's history.
2. Allocation by the CRMB of 60 per cent of Ceylon's production and increased supplies from American and African sources during 1944–45.[8]

Natural rubber yields in the Western Hemisphere were disappointing when compared with early estimates or dollar cost of the program.[9] However, rated on its true potentialities and considering the importance of even small additions to our stockpile, the Latin American program achieved some success. The domestic guayule program was a failure.[10]

TABLE 1

UNITED STATES NEW SUPPLY OF NATURAL RUBBER AND LATEX 1940–45

(Thousands of long tons)

IMPORTS	1940	1941	1942	1943	1944	1945
Latin American	11.1	10.8	14.5	26.2	32.8	37.6
Far East	799.8	1,007.6	255.5	20.1	60.3	69.9
African	7.3	10.6	12.6	13.6	19.0	35.7
Subtotal	818.2	1,029.0	282.6	59.9	112.1	143.2
U. K. Transf.	—	—	—	—	1.5	1.7
Salvage	—	—	0.1	0.4	0.3	[a]
Total Imports	818.2	1,029.0	282.7	60.3	113.9	144.9
Less Shrinkage	—	—	—	5.3	6.2	9.8
After Shrinkage	818.2	1,029.0	282.7	55.0	107.7	135.1
U. S. Guayule Production	—	—	—	0.3	0.1	0.6
Total New Supp. After Shrinkage	818.2	1,029.0	282.7	55.3	107.8	135.7

[a] 28 long tons.

Source: Facts for Industry, Tables 3, 4. Civilian Production Administration, Rubber Division, Bureau of Census Series 26-1-1.

[8] Natural rubber production in Ceylon during the war exceeded the United Kingdom's normal prewar consumption. The U. K. doubled reclaimed rubber production in 1943–44 over 1942 levels and in addition received finished rubber products on lend-lease account. Imports to U. K. from African sources were increased: in 1942—7,431 l.t.; in 1943—18,451 l.t.; in 1944—21,458 l.t.; and in 1945—13,377 l.t.

[9] Cost of the Western Hemisphere natural rubber program was estimated at 88.37 cents per pound by the Rubber Development Corporation for 50,000 l.t. dry weight received from April 1942 to June 1944. Total cost was $45,000,000.—Rubber Development Corporation release, August 8, 1944. In budget hearings for the fiscal year ended June 30, 1947, Rubber Development Corp. estimated natural rubber costs through June 30, 1947, at an average of 65¢ per pound.

[10] See footnote 7 above. The total cost of the guayule program is estimated at approximately $45,000,000 by the Federal Reserve Bank of San Francisco. The Poage Bill (H.R. 2347) passed by the House on May 14, 1945, would have fostered private guayule production in the southwestern states by pegging the price at 28¢ per lb. until June 30, 1956. The bill

These small additions to natural rubber supplies were combined with greater reductions in consumption from 1941–45 (Table 1) to maintain minimum natural rubber stockpiles.

UNITED STATES IMPORTS, CONSUMPTION, STOCKS, NATURAL RUBBER 1941–45
(Thousands of long tons, dry weight)

	1941	1942	1943	1944	1945
Imports	1,029.0	282.7	55.0	107.7	135.1
Consumption	775.0	376.8	317.6	144.1	105.4
Stocks, end of year	527.8	422.7	139.6	93.6	118.7

II

United States synthetic rubber production capacity in 1939, about 4000 tons per year, ranked below Russia and Germany, the latter with an estimated capacity of 20,000 tons.[11] The types of rubber manufactured in the United States and Germany and the processes and raw materials used were basically similar. United States capacity had been increased by early 1941 to 10,000 tons (Neoprene 5700, Buna N 2500, Thiokol 1200, Buna S. and other 600). American industry was aware of the critical importance of building a synthetic rubber industry and 10 leading manufacturers met with the Advisory Commission to the Council of National Defense on August 7, 1940, and agreed to prepare enginering plans by October of the same year for government financed construction of 108,000 tons additional Buna S (GR-S) production capacity. The ANMB (Army Navy Munitions Board) aproved this proposal in September 1940, and recommended the expenditure of $50,000,000 for government construction of the plants. It was not until May 1941 that the Defense Plant Corporation entered into contracts for construction of four synthetic rubber plants with total initial capacity of 10,000 tons, expanded to 40,000 tons in July 1941. More important than the eight-month delay and cutback in the copolymer (final rubber manufacturing) plants was the fact that contract authorizations for butadiene production, the most critical raw material in Buna S rubber, were let for only 15,000 tons in May 1941, and were not increased until January 1942.[12] Although it may be argued

did not become law. The cryptostegia planting program in Haiti, which had begun in 1941 under SHADA, was continued following the Baruch report. This program, which is estimated to have cost $6,900,000, yielded no production in 1943–44 and was abandoned as a failure in June 1944, owing to unfavorable weather conditions, insect pests, and lack of an efficient extraction process.

[11] U. S. Dept. of Commerce, Bureau of Foreign and Domestic Commerce, *Rubber, History, Production, and Manufacture*, pp. 40–43. Estimates were included showing the USSR as the largest producer of synthetic rubber in 1939, with estimated capacity of 50,000 tons. The estimates of Russia's synthetic capacity are controversial, and the Department of Commerce estimates were based upon alcohol consumption. German imports of natural rubber were subject to an import duty after May 1937 of approximately 23¢ per lb., the money obtained allocated to the building of synthetic rubber plants.

[12] S. T. Crossland, executive vice president of Rubber Reserve Co., summarizes the reasons for the delay in the program but not for the cutback in the recommended capacity in *Report on the Rubber Program, 1940–45*, Rubber Reserve Company, Feb. 24, 1945.

that engineering plans submitted in October 1940 were incomplete, that synthetic rubber technology was not sufficiently far advanced to justify more than experimental production, and that caution was required since the plants might represent an uneconomic investment of government capital, the fact is that the United States synthetic rubber production program at the time of Pearl Harbor was less than one half that recommended by private industry, NDAC, and the ANMB over a year previously.

The production objective for the synthetic rubber program was raised to 400,000 long tons immediately following Pearl Harbor, to 600,000 on March 3, and to 800,000 on April 21, 1942. Decisions had to be reached during this period regarding: (1) the quantities of each type of synthetic rubber to be included; (2) the processes to be used in producing the principal raw material required for Buna S (GR-S) rubber, butadiene.

Experts were in general agreement that Buna S rubber was the type best suited for tire production. In addition the War Production Board added to the program in March and June 1942 (Table 2) Butyl rubber, a type superior to natural rubber for use in tubes and favored by Standard Oil experts as the best general purpose synthetic rubber, and Neoprene, developed by the duPont Company for uses requiring oil resistance and abrasive properties.[13]

Five processes for producing butadiene were considered, three based upon use of petroleum gases and two requiring alcohol as raw materal. The original DPC contracts authorized were based upon a process sponsored by the Standard Oil Company of New Jersey requiring use of butylenes, petroleum refinery gases. The Office of Petroleum Coordinator, Sun Oil Company, and others advocated wider use of other petroleum gases, naphtha and butanes, in a plan for conversion of existing refinery facilities to butadiene production. A third process required use of benzene, produced from petroleum gases or coke. A 40,000-ton benzene-butadiene plant under construction by the Koppers United Company was rescinded in July 1942 when it became apparent that benzene, required for production of aviation gas and styrene (second basic ingredient of GR-S rubber) would not be available in sufficient quantities.

The most important process based upon the use of alcohol as raw material was sponsored by Carbon and Carbide Chemicals Company and received wide support from the Gillette Committee and farm groups. The other, based upon butylene glycol, produced by fermentation of grain and potatoes, and advocated by Joseph Seagram's Sons and the Department of Agriculture, was later found impractical.

Over 100 separate congressional committee hearings were held on various phases of the rubber program from January 1942 to July 1943. Increases in the authorizations for plants using the alcohol and refinery conversion processes during July and August 1942 resulted in large part from pressures upon WPB and RFC by these committees.

[13] Reference to current literature on synthetic rubber is found in Idair Smookler, *Economics of Synthetic Rubber, A Selected Bibliography*, Library of Office for Emergency Management, Aug. 9, 1943.

TABLE 2

ANNUAL CAPACITY OF SYNTHETIC RUBBER PROGRAM AS OF SELECTED DATES

TYPE OF RUBBER	RUBBER RESERVE COMPANY						BARUCH	OFFICE OF RUBBER DIRECTOR			
	May 15, 1941	Jan. 9, 1942	Mar. 1, 1942	Apr. 1, 1942	June 1, 1942	Aug. 18, 1942	Committee Recommendation Sept. 10, 1942	Nov. 30, 1942	Feb. 18, 1943	June 30, 1943	Feb. 24, 1945
(Long tons)											
Govt. and private											
Buna S	10,000	120,000	195,000	585,000	615,000	705,000	845,000	705,000	705,000	705,000	705,000
Butyl	—	—	38,000	38,000	68,000	132,000	132,000	132,000	68,000	68,000	68,000
Neoprene	9,000	9,000	49,000	49,000	49,000	49,000	69,000	69,000	49,000	49,000	60,000
Thiokol	900	900	900	900	900	24,900	60,900	24,900	24,900	24,900	—
Buna N types[1]	18,000	18,000	18,000	18,000	18,000	18,000	—	18,000	18,000	18,000	18,000
Raw Materials											
(Short tons)											
Government only											
Butadiene											
Petroleum process (DPC)[2]	15,000	15,000	215,000	430,000	526,200	380,000	394,300	351,700	351,700	351,700	345,000
Petroleum process refinery conversion[3]			—	—	—	30,160	127,000	176,850	76,800	53,800	57,500
Alcohol process			40,000	80,000	80,000	220,000	247,000	220,000	220,000	230,000	220,000
Benzene			40,000	40,000	40,000	—	—	—	—	—	—
Total butadiene	15,000	15,000	295,000	550,000	646,200	630,160	768,300	748,550	648,500	635,500	622,500
Styrene		32,500	70,000	197,500	200,000	167,500	225,300	191,700	191,700	192,700	187,500

[1] All privately owned. Plants have not run at capacity because of shortages of raw materials.
[2] Includes butane, butylene, naphtha, authorized by Rubber Reserve prior to Aug. 1942.
[3] Includes naphtha, natural gas, and combination butylene-naphtha recommended by the Baruch report and ORD after Sept. 1942.

Source: Rubber Reserve Co., *Report on the Rubber Program, 1940–1945*, Feb. 1945. Estimates of capacity prior to Feb. 1945 compiled by the author from Rubber Reserve and ORD reports.

The climax to the dispute over raw materials processes was reached on July 26, 1942, when the House of Representatives passed and sent to the White House a Senate bill (S 2600) to create an independent rubber agency to make rubber from alcohol produced from agricultural and forest products. The President vetoed the bill on August 6, 1942, and appointed the Rubber Survey (Baruch) Committee to investigate the entire situation and "recommend such action as will produce the rubber necessary for our total war effort, including essential civilian use, with a minimum interference with the production of other weapons of war."

The report of the Rubber Survey Committee recommended that the government "bull through" the current synthetic rubber program, add to Neoprene and Thiokol capacity, and increase butadiene capacity, using the refinery conversion and alcohol processes. The recommendations for increased capacity were acted upon immediately by the newly appointed Rubber Director, William Jeffers, but were abandoned almost in their entirety by February 1943.[14]

An important recommendation of the Baruch report was that there be "a complete reorganization and consolidation of the governmental agencies concerned with the rubber program, and centralization of control over all matters relative to the rubber program in a Rubber Administrator, appointed by the Chairman of the War Production Board," who was to be instructed to divest himself of all "direct concern with these matters." The need for centralization of authority over the choice of processes and over-all planning of the program was quite evident in the continuous disputes between the Office of Petroleum Coordinator for War, Rubber Reserve, WPB bureaus, and proponents of alternative types of rubber and processes. The independent authority over the entire program granted to the Rubber Director by executive order of the President on September 17, 1942, resolved administrative disputes in the program, but proved a source of increasing difficulty to the successful completion of the over-all objectives of satisfying military and civilian requirements during the years 1944–45, when maximum coordination was required between all phases of component materials production.[15]

The weakness in this semi-independent type of administrative organization became apparent in a conflict in late 1942 between the ORD and the Petroleum Coordinator for War over the comparative priority ratings to be assigned to orders for valves, heat exchangers, pumps, and motors for the rubber and aviation gas programs. The conflict was settled early in 1943 when the WPB set up sequences of completion dates for the plants in the two programs.

[14] Reasons for abandonment of these recommendations given in *Progress Report No. 2*, Office of Rubber Director, WPB, Feb. 18, 1943, included scarcity of raw materials and components, an excess of actual overrated capacity for the alcohol butadiene plants, and the results of tests having shown that Neoprene, Butyl, and Thiokol were unsuitable for tires.

[15] Successful coordination of research in a Rubber Research Board was an important administrative accomplishment of the ORD. A description of the research program and recommendations for its continuance are found in Norman A. Shepard's "Address Delivered at the Opening and Dedication of the Goodyear Research Laboratory, Akron, Ohio, June 22, 1943" (mimeograph), The Goodyear Tire and Rubber Co., 1943. Supervision of research was transferred to Rubber Reserve in 1945.

The rate of completion of butadiene plants was the principal factor influencing the rate of production of synthetic rubber during 1942–44. Although earlier estimates were predicated upon completion of certain of these plants by October 1942, the first government butadiene was produced in January 1943 by the alcohol butadiene process. (Synthetic rubber produced in government plants in 1942 was made from butadiene purchased from private producers.) Productive capacity of the alcohol butadiene plants was in excess of rated capacity and eventually proved to be 180 per cent of plant design.[16] The importance of the latter factor can be noted from the comparison of rated capacity and actual production for alcohol and petroleum butadiene plants.[17]

SHORT TONS

	RATED CAPACITY	DEMONSTRATED OPERATING CAPACITY	PRODUCTION	
			1943	1944
Alcohol butadiene plants	220,000	396,000	129,685	361,734
Petroleum	402,500	426,250	27,787	195,719

Alcohol butadiene accounted for less than 40 per cent of total 1945 production. Recently it has been recommended that only the presently efficient petroleum butadiene plants and one alcohol butadiene plant, a total of 550,000 short tons of butadiene capacity, be retained in operation or in standby condition after supplies of natural rubber become available.[18]

Actual production of synthetic rubber in 1943 (Table 3) fell below estimates made by the Baruch Committee and the Rubber Director,[19] owing principally to the delay in authorization of butadiene plant contracts by the Rubber Reserve Company. Contributing factors to the disappointing 1943 production included: cutbacks in the Baruch recommended program by the Rubber Director in February 1943; technical bugs in the butyl (GR-I) production process; shortages of certain material components needed for the petroleum butadiene plants; and greater delays than expected in the refinery conversion and Houdry process butadiene plants.

[16] Rubber Reserve Co., *Report on the Rubber Program 1940–45*, Feb. 1945. See also *Special Report of the Office of Rubber Director on the Synthetic Rubber Program, Plant Investment and Production Costs*, War Production Board, Aug. 31, 1944.

[17] *Ibid.*, p. 62.

[18] *First Report, Interagency Policy Committee on Rubber*, Office of War Mobilization and Reconversion, Feb. 19, 1946, p. 37.

[19] The following estimates were taken from the *Report of the Rubber Survey Committee*, Sept. 10, 1942, and from *Progress Report No. 2*, Office of Rubber Director, Feb. 18, 1943.

ESTIMATED EQUIVALENT CRUDE PRODUCTION, 1943

	Baruch	*Ord*
Buna S (GR-S)	386,000	195,200
Butyl	62,000	18,400
Neoprene	30,000	30,400
Thiokol	54,000	—
Buna N types	—	16,400

Concerted efforts by prime contractors and the ORD during 1943 resulted in a level of synthetic rubber production by December 1943 in excess of the current consumption. From that point on, the rubber problem became one of conversion to use of synthetics and conservation of our dwindling supplies of natural rubber.

III

As evidences of shortages appeared early in 1942 each industry branch of the War Production Board developed an individual control system over critical materials for which it had responsibility. These controls ranged in extent from close supervision over production, consumption, and distribution to control over primary fabricators' consumption only. The system of WPB priority ratings and Requirements Committee allocations to claimant agencies became

TABLE 3

U. S. Production of Synthetic Rubber, 1942–1945

(Long tons)

Types	1942	1943	1944	1945
GR-S (Buna S)	3,721	182,259	670,268	719,404
Butyl	23	1,373	18,890	47,426
Neoprene	8,956	33,603	56,660	45,672
Buna N type	9,734	14,487	16,812	7,871
Thiokol	1,821	2,159	623	738[1]
Polyisobutylene	883	1,734	1,569	1,830[1]
Total	25,138	235,615	764,822	822,941

(Includes U. S. government and private plants.)

[1] First 8 months reported only.

Source: Civilian Production Administration, *Facts for Industry*, U. S. Department of Commerce, Bureau of the Census, Series 26-1-1, June 28, 1946; Rubber Reserve Co., *Report on the Rubber Program*, p. 58.

ineffective in 1942 as material requirements increased and procurement agencies uprated orders in order to obtain scarce materials. The Controlled Materials Plan, adopted in 1943, replaced independent branch controls over carbon steel, alloy steel, copper, and aluminum, with a vertical, integrated allocations system controlling the use of these commodities from production of the basic material to distribution of end products.[20]

The early system of controls over rubber, established in 1942 by the Rubber and Rubber Products Branch, WPB, and representatives of the claimant agencies, provided for: allocations of rubber among the United Nations countries by the CRMB, determination of claimant agency quotas for consumption of rubber in the United States by the WPB Requirements Committee and its subordinate Rubber Allocations Subcommittee, stockpile control by the Rubber Reserve Company, and consumption controls under supervision of the industry branch (Chart II). Civilian rubber products were rationed by OPA.

[20] War Production Board, *Controlled Materials Plan*, General Instructions, Nov. 14, 1942.

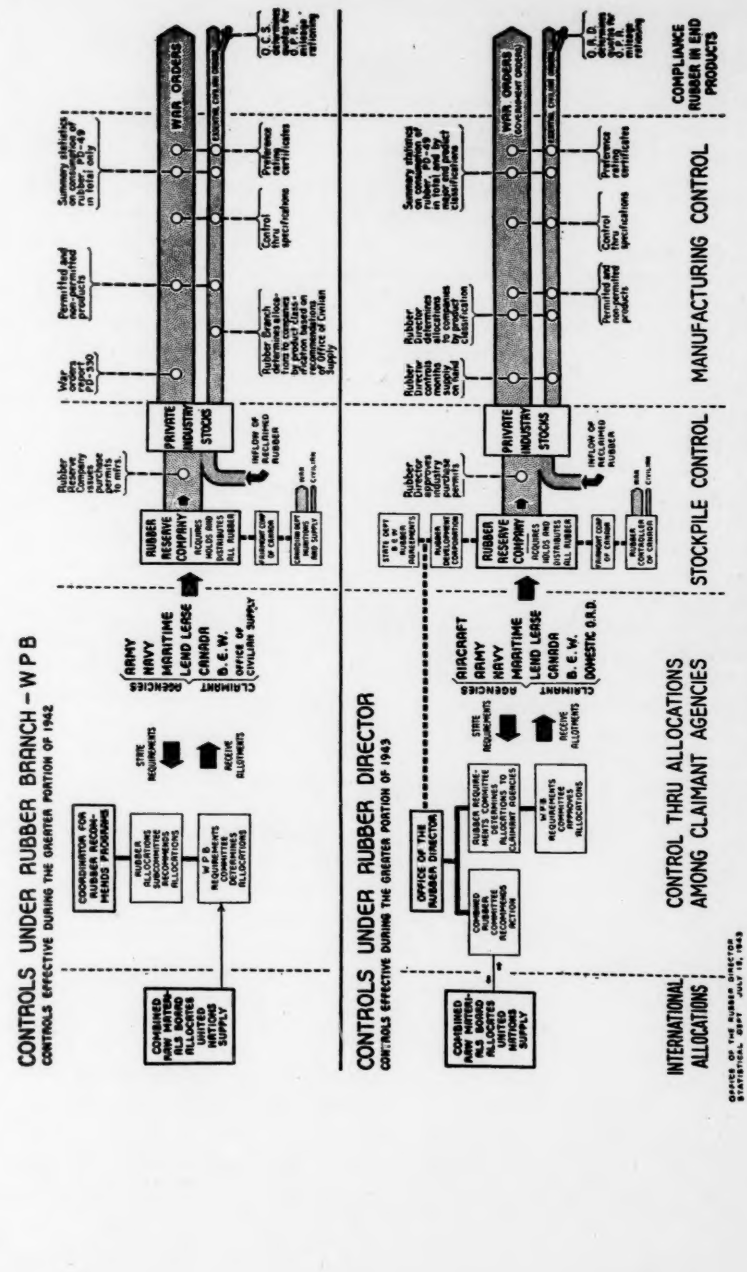

Chart II. Control of Rubber During World War II

The system was deficient in three major respects:

1. Requirements as stated by claimant agencies were inaccurate and generally overstated.
2. Orders for finished products were not cleared through any central agency.
3. Industry statistical reporting procedures did not permit a reconciliation of the use of rubber with claimant agency allocations.

Preparation of accurate rubber requirements by the Army and Navy was difficult because unit end product requirements were constantly changing; and raw material content of the same products varied widely among manufacturing companies and different bureaus in the Army and Navy, and for many sizes and types of the same article. Accurate replacement demand factors were unknown for most products, making calculation of replacement requirements a matter of guesswork. The Army and the Navy were unprepared for the statistical task of estimating raw material content of the thousands of finished products used. Estimates of rubber requirements for the Army and Navy were usually based upon previous reported use by the industry, with a generous allowance for a rising trend.

Industry branch procedure for controlling the use of rubber was handicapped by the fact that military orders were placed directly with manufacturers. The chief of the Rubber Branch had requested on December 8, 1941, that all government orders be cleared through the branch, but this was not agreeed to by the Army and Navy. Following the German "breakthrough" late in 1944, military tire orders were cleared through the Rubber Bureau, WPB. Such a production control system was indispensable to calculation of accurate requirements and efficient allocations control.

Industry reporting forms permitted no continuous check on the consumption of rubber by claimant agencies, or by types of products.[21] This meant that the principal emphasis in control was over total consumption of rubber, the individual company remaining relatively free to juggle its use of rubber among different products and claimant agencies.

The first industry branch order restricting consumption of rubber (M-15, effective July 1, 1941) was prepared by representatives of RMA, Rubber Reserve, OPM, and ANMB, and provided for a gradual reduction in rubber consumption during the last half of 1941 with the objective of limiting use during the period to 300,000 long tons. (This rate of consumption had been exceeded in only one previous year in United States history, 1940.) Consumption during the last half of 1941 exceeded the quota by over 50,000 long tons (not including a portion of June 1941 record consumption of 85,862 long tons reported as put into process and applicable to the latter half of the year). Increased allotments for November and December 1941, which were recommended by the Rubber Branch chief, with unanimous industry approval, were not granted.[22]

[21] Form PD-49 provided a division of reported consumption by end products for war and civilian use from January to June 1943, after which the product division was eliminated.

[22] Civilian Supply Division chiefs did not support Barton Murray's recommendation, as a result of which he resigned as branch chief on Dec. 5, 1941.

Supplementary Order M-15-b, prepared during November and December 1941, in the Rubber Branch, OPM, to be made effective in the event of war with Japan, was issued on December 10, 1941, and provided that:

1. No rubber could be used or tires and tubes shipped for war orders except for ratings of A-3 or higher.
2. No rubber could be used for nonwar orders in excess of the amounts used in November 1941.
3. Rubber goods other than tires and tubes could not be shipped in excess of November 1941 shipments.

A new order, M-15-b-1, was issued February 11, 1942, providing specification lists for all nonwar rubber products manufactured. Fourteen amendments to M-15-b and 16 amendments to M-15-b-1 were issued between December 19, 1941, and September 1, 1942,which extended the lists of prohibited uses, prohibited manufacture of civilian passenger tires and tubes from January to September 1942, limited finished products inventories to 60 days' supply, and gradually reduced crude rubber consumption.

Following the Baruch report, allocation control over synthetic rubbers, previously exercised by the Chemicals Division, Synthetic Rubber Section, WPB, was placed under the Rubber Director. (Order M-13 had placed synthetic rubbers under specific end-product allocation in June, 1941.) Allocations procedures for synthetic rubbers remained unchanged until the lifting of specific end-product allocations on GR-S in mid-1943.

The Office of the Assistant Deputy Rubber Director in charge of Operations (the old Rubber Branch, WPB, expanded), assumed the function of claimant for civilian end products containing rubber after the Baruch report, replacing the OCS (OCS and OPA were both headed by Leon Henderson), previously responsible for calculation of civilian tire requirements. Crude rubber purchase permits, previously handled by industry directly with Rubber Reserve Company, required approval by the allocations section in ORD, thus sharpening an important point of control.

The changes in rubber allocations to manufacturers made by the new Assistant Deputy Rubber Director in 1943, summarized in Rubber Order R 1, effective July 1, 1943, included:

1. Quarterly manufacturers' quotas for war and civilian consumption (separately) of crude, latex, and reclaim, based upon use during the previous nine months. (Smaller consumers had a single quota for both war and civilian use.)
2. Further downward revisions in crude rubber content of products in 33 specification lists of products for war and civilian use.

A system of technical committees (built around existing RMA groups) was organized in June 1943 by ORD to assist in conversion to synthetic rubber. Allocations of GR-S were made to manufacturers in June for passenger tire manufacture. Synthetic rubber production increased rapidly after August 1943, and over 40,000 tons were on hand at year end. By July 1944, the Rubber Director stated that "were it not for the present manpower situation, it would

be possible to remove practically all of the restrictions which now exist except as they are necessary to protect against the use of crude rubber for any nonessential items or for any use which can be adequately filled by synthetics."[23] Immediately after VJ Day all restrictions on the use of reclaim, GR-S, GR-M (Neoprene), and Buna N types of rubber were revoked and quantitative restrictions on passenger, truck, farm implement tires, and camelback were removed by revision of Rubber Order R-L. Restrictions were continued on consumption of natural rubber.

The years 1942–43 were the crucial years in the conservation of natural rubber. Civilian use of natural rubber was reduced in 1942 to less than one-fifth and in 1943 to approximately one-tenth of record 1941 consumption (Chart III).[24] Increased synthetic rubber production, the assurance of a portion of Ceylon's production, and the emergence of other limiting factors after the fall of 1943 greatly reduced the emphasis in the total program upon supplies of rubber. The early and substantial reduction in civilian rubber use can be attributed to the imposition of controls over rubber consumption six months before Pearl Harbor, with plans well laid for further restrictions in the event of war. The prohibition of civilian passenger tire production during the first nine months of 1942, the elimination of many civilian rubber articles, and the imposition of strict rationing control over tires and tubes were important factors conserving natural rubber.[25] The production of the all reclaim tire in the last quarter of 1942, which had been advocated by the rubber industry, was a mistake, for not only did the tire prove unsatisfactory, but 18,000 tons of Grade I reclaim were used which were to be needed in 1943 for camelback production. The allocation of additional quantities of GR-S and reclaim in the spring of 1943 for new passenger tire production further accentuated the shortage of materials for camelback manufacture. Industry branch controls were administered independently of rubber allocations by the Requirements Committee, WPB. Claimants were relied upon to reduce consumption by restricting orders placed with manufacturers and altering specifications to remain within their quotas. The emphasis in branch controls was upon limiting total use of rubber by manufacturers.[26]

[23] Rubber Director, *Progress Report No. 6*, War Production Board, July 25, 1944.

[24] See footnote 40, below. Estimated 1944 civilian consumption of natural and synthetic rubber, 80,000 l.t.

[25] Supplementary Order M 15-c, December 27, 1941, placed restriction on the sale or delivery of new tires or tubes and set up local tire ration boards. Subsequent amendments prescribed strict eligibility rules. The imposition of gasoline rationing in the East in May 1942 and nation-wide gas rationing in Nov. 1942 aided in conserving rubber on tires.

[26] The system of rubber controls in use in the United Kingdom in 1942 included the basic elements for an efficient system. The Raw Materials Committee allocated rubber to each government department for 13-week periods. Government departments furnished to the Ministry of Supply their needs, expressed in tires for each month. Tyre Control checked the rubber required for these tires with raw materials allocations and made any adjustments necessary. Tyre Control allocated each of 11 factories a share of new tires in proportion to their capacity and previous output, considering first the extent to which needs could be filled from existing inventories. Each company was then issued the license to consume natural rubber and reclaim necessary to meet its share of the manufacturing program for the period.

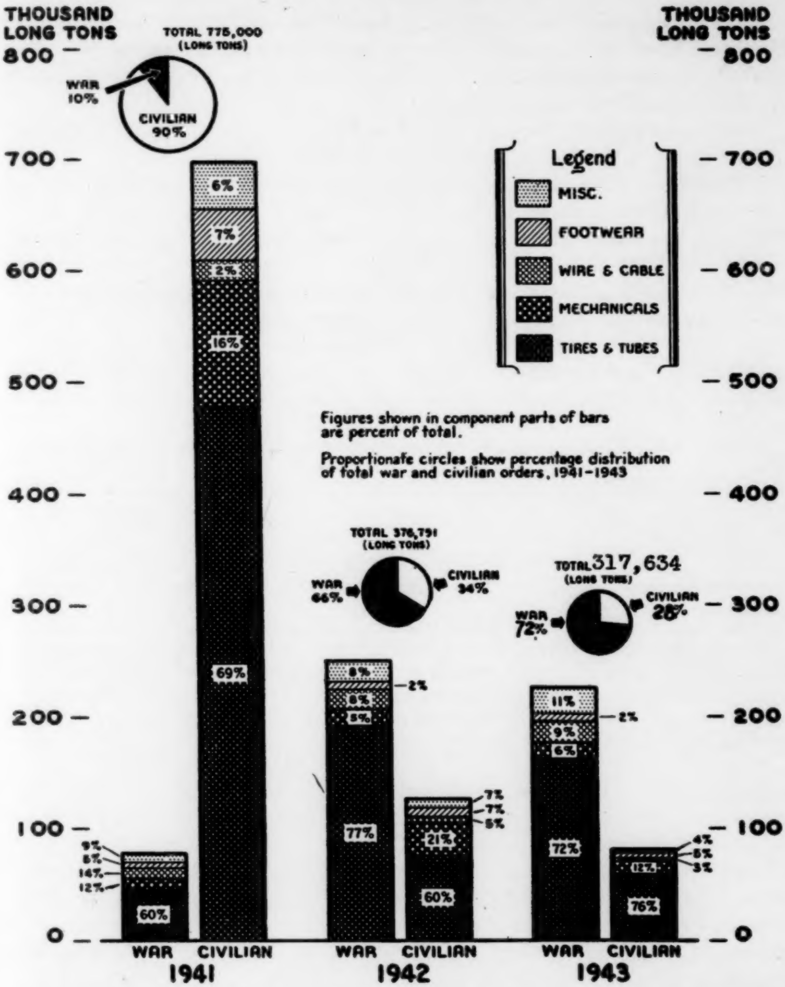

CHART III. U. S. CONSUMPTION OF CRUDE RUBBER AND LATEX FOR WAR AND CIVILIAN ORDERS BY MAJOR PRODUCT CLASSIFICATION, 1941–1943

Reconditioning of tires was also carried on in the tire factories. A single reporting form in 4 sections was issued by Ministry of Supply to each company to be returned not later than seven days after the period covered. It included monthly consumption and stocks of crude, reclaim, Balata, scrap, and 12 principal types of rubber chemicals; an analysis of consumption of crude rubber for 19 product groups for 8 claimant agencies, analysis of reclaim and scrap consumption by product groups only, and a reconciliation of production, purchases, stocks of reclaim and scrap rubber. Source: *Memorandum on the General Procedure of Tyre Control Department, 1942* (unpublished).

Adequate supplies of synthetic rubber, assured by mid-1943, did not mean that the rubber problem was solved. The ultimate success of the rubber program was to be measured by the degree to which finished rubber products were made available for military and civilian use.

Officials of the Public Roads Administration, OPA, and ODT called attention to the urgency of the civilian tire situation in 1943.[27]

Civilian truck tire production, which averaged over 8,000,000 annually during 1939–40, had been reduced to 3,000,000 per year in 1942–43. High levels of truck and bus traffic during the war years had brought the condition of tires on these vehicles to a dangerously low point. Inventories of truck tires in June 1943 totaled 1,500,000 and were being reduced at the approximate rate of 300,000 per month, with acute shortages in the popular sizes.

The condition of tires on the 26,000,000 passenger cars in use was estimated by the Rubber Director early in 1943 to be 40 per cent of normal (1939).[28] Total

TABLE 4

PLANNED PRODUCTION AND MANUFACTURERS' SHIPMENTS OF CIVILIAN TIRES, 1944

(Millions of tires)

	PASSENGER		TRUCK	
	New tires	Recaps	New tires	Recaps
Planned production	30.0	25.0	8.0	8.5
Manufacturers' shipments	18.0	14.0	4.8	1.3

Sources: *Progress Report No. 4*, Nov. 10, 1943, p. 9; *No. 5*, March 17, 1944, p. 7. Estimates of passenger tire production were reduced to 22,000,000 in March 1944. Manufacturers' shipments differed from production figures by less than 1 per cent; *Report of the Director of Rubber Programs to WPB*, Nov. 3, 1945; Rubber Bureau, WPB, *Production, Shipments and Inventory of Tires, 1944*, March 22, 1945.

inventories of prewar, reclaim, used, and synthetic tires available for rationing were down to 4,200,000 by September 1, 1943, an amount less than the previous two months' ration quotas.

Faced with this problem and with the admonition of the Baruch Committee to "keep the cars on the road," the Office of Rubber Director planned to expand production of civilian tires in 1944 to prewar levels. The planned production program was designed to return the condition of passenger and truck tires on the road by 1944 year end to the approximate 1942 condition and required an expansion of about 50 per cent in total consumption of natural and synthetic rubber over 1943 levels. Comparison of actual civilian tire production with that planned in 1944 (Table 4) indicates that the over-all production objective

[27] Automobile Manufacturers Association, *Automobile Facts and Figures, 1944–45;* U. S. Public Roads Administration, *The Tire Crisis*, May 1943; Office of Defense Transportation, *ODT Release 335*, OWI, Aug. 24, 1943.

[28] Sparks Bonnet, chief OPA Tire Rationing Branch, "Tire Rationing in 1944," address at NAITD Second Annual Rubber Conservation Conference, New York City, Oct. 12, 1943. It was estimated that by June 30, 1943, there were outstanding unfilled certificates ("hunting licenses") for approximately 150,000 truck tires and 1,500,000 passenger tires.

for that year was not reached and that the civilian tire program, as residual claimant, was sacrificed.

The increase in 1945 military requirements resulted in a new set of production objectives for that year, which were revised after VE Day.[29] Approximately 25,000,000 passenger and 6,000,000 truck tires were produced and shipped in 1945 for civilian use. This favorable showing was due to the sharp reduction in military requirements during the last half of 1945.

The reasons for the failure to realize total production objectives for 1944 or 1945 are found in the emergence of five successive problems during late 1943 and 1944.

Problem 1. There was insufficient production of synthetic rayon and cotton tire cord.
Problem 2. Milling capacity of the industry was inadequate to handle the planned production.
Problem 3. There were shortages of rubber compounding materials.
Problem 4. Labor shortages threatened the success of the production of tires and other finished goods.
Problem 5. 1945 military requirements for large size truck and airplane tires were increased substantially over projected estimates.

These problems were left virtually unattended until adequate supplies of synthetic rubber became available in the fall of 1943. The story of the rubber problem from that point forward is one of delays incidental to overcoming these problems in succession.

Problem 1—The ORD requested that WPB authorize an additional 100,000,000 pounds of high tenacity rayon capacity for use in synthetic airplane, military, and truck and bus tires in April 1943. (Capacity had been increased from 50 to 100 million pounds by WPB authorization in September 1942.) After publication of a report by the Truman Committee stating that rayon displayed no superiority over cotton tire cord, the matter was studied by the WPB, War and Navy Departments and the additional capacity finally approved in September 1943.[30] Shortage of rayon tire cord owing to delays in completing this expansion program, which involved 50 projects and cost $75,000,000, necessitated the continued use of natural rubber and cotton tire cord in many military products in 1944. By mid-1944, inventories of rayon tire cord were down to less than one month's supply.[31] The rayon tire cord supply position remained tight through June 1945, when production from some of the new facil-

[29] *Report of the Special Director of Rubber Programs to WPB*, June 25, 1945. A new study of civilian tire requirements by RMA in June 1945 placed minimum civilian replacement needs for 1945–46 as follows:

	Millions of Tires 1945	1946
Truck and bus	6.3	5.5
Passenger	20.0	22.0
Farm tractor	.7	.8

[30] Special committee investigating the National Defense Program pursuant to Senate Res. 71, "Comparative merits of rayon and cotton tire cord." Government Printing Office, Washington, D. C., July 16, 1943.

[31] Office of Rubber Director, WPB, *Progress Report No. 6*, July 25, 1944.

ities was still awaited. Following the reduction in military requirements after VE Day, the uncompleted portion of the rayon expansion program was canceled.

Shortages of cotton tire cord, which were accentuated by the rayon cord shortage, limited production of civilian passenger and truck tires in late 1943 and 1944. Tire cord capacity had been diverted during 1942–43 to production of army duck and other materials. In addition, there was an over-all limit on twisting capacity affecting both rayon and cotton tire cord. Plans for the reconversion of tire cord facilities from duck production were started by the fall of 1943. Cotton tire cord production was not increased substantially in 1944 owing to labor shortages, and inventories were equal to only one month's supply by June 1944, even though passenger tire production was at a rate less than half that planned. By the end of 1944 each tire manufacturer was receiving a quota of cotton tire cord, which was the limiting factor in its passenger tire production. The supply position in cotton tire cord and other cotton textiles remained tight throughout 1945.

Problem 2—Noting that synthetic rubber requires longer milling than natural, the Baruch report had said: "There will not be sufficient factory capacity to deal with the quantities of synthetic rubber that will be produced in 1944," and recommended that the Rubber Director review the problem early in 1943.[32] A $75,000,000 expansion program estimated to increase total milling and mixing capacity of the industry by 50 per cent by the 1944 year end was approved by the WPB in the fall of 1943.[33] From January to August 1944 a shortage of milling and mixing capacity placed an over-all limitation upon the amount of rubber which could be consumed for all purposes. The residual claimant position of the civilian tire program and the shortage of cotton tire cord brought the full effect of these shortages upon the planned production of civilian passenger and truck tires. An expansion program for the production of large size military tires was approved early in 1944, and, based upon increased 1945 military requirements, an additional $132,000,000 expansion program was approved in December 1944 and January 1945. Most of this capacity was canceled following the cutbacks in military requirements after VE Day.[34] Shortages of labor and other components precluded the full use of facilities after mid-1944.

Problem 3—Approximately 60 per cent of the total weight of rubber compounds consists of rubber. The balance is made up of about 2000 different materials headed by various types of carbon blacks, oils, solvents, pigments, and metals.

[32] The Baruch report had estimated that it would take a third more time to mill synthetic than natural rubber. Later estimates indicated that GR-S and reclaim required approximately 10%, Neoprene 50%, and Buna N types 100% more time than natural rubber.

[33] Office of Rubber Director, WPB, *Progress Report No. 5*. It was estimated at the time that delivery of the Banbury mixers would commence in Jan. 1944 at the rate of 3 per month and gradually increase to 10 per month by March 1944.

[34] The peak in milled stock production following the addition of facilities in 1944 was 109,679 l.t. of all natural and synthetic rubber. This compares with indicated capacity before the expansion program of 84,000 l.t. of natural rubber. The net expansion authorized in late 1944 and early 1945 is estimated at 32%. War Production Board, *Report of the Director of Rubber Programs to the WPB*, Nov. 3, 1945.

The Chemicals Division, WPB, had 17 furnace type carbon black plants under construction during 1943 to fill the expected increased demand for one of the more important rubber chemicals. By early 1944, however, it developed that easy processing channel black possessed desirable qualities for milling with synthetic rubber. Extensive readjustments in plant design and the use of naphtha and other raw materials required in the aviation gas program were necessary to expand production.[35] The carbon black shortage was so critical that cuts of 5 to 25 per cent were made in the amount of black used per tire in February 1945, and the work week in tire plants reduced from 7 to 6 days in April 1945.[36] The shortage was remedied by June, and by September 1945 it was recommended that production of "easy processing channel blacks" be lowered due to the ample supplies on hand.

Fatty acids, plasticizers, softeners, color pigments, rosin, and beadwire were other materials in critical supply in 1944. Continued efforts were exerted during 1944 by the Chemicals Bureau, Steel Division, and the Rubber Bureau to obtain necessary supplies of these materials. It was not until June 1945 that an industry study of component material requirements was available. By this time military requirements had been lowered and it became apparent that adequate supplies of rubber chemicals would be available to carry on the rate of production permitted by labor and other component shortages.

Problem 4—As a result of a high level of military withdrawals and absenteeism the Rubber Director reported on July 25, 1944, that "less than 6000 additional workers, about half the number to be strong, husky men, stand between the present shortage of tires and an ability to meet all essential requirements."[37]

Many of the older employees had left the heavy tasks as calender operators, millmen, and truck tire builders for the high wage lighter work on fuel cells, rubber boats, aircraft, and other new war products.[38]

In August 1944 manpower requirements for heavy duty tire production were placed on the National Urgency List, second only to certain secret projects. Through the cooperation of the Army, 4,000 additional workers were added to the industry in late 1944.[39] All members of the industry signed a pledge assuring seven-day operations which were continued until the carbon black shortage forced a reduction in April 1945.

Problem 5—The ORD 1944 planned production program had been based on

[35] Office of Rubber Director, WPB, *Progress Report No. 5*, March 17, 1944.

[36] War Production Board, *Report of the Special Director of Rubber Programs to the WPB*, June 25, 1945; *Interstate Oil Compact Bulletin*, June 1945; John F. Gallie, "Carbon Black in Its Relation to the Natural Gas Industry," *United Rubber Worker*, April 1945.

[37] *Progress Report No. 6*. The withdrawals were effected before the Interagency Committee on Occupational Deferments recognized the needs of the rubber industry and could be of material assistance.

[38] Bulletin No. 737, Bureau of Labor Statistics, *Wages in Rubber Manufacturing Industry*, Aug., 1942; *Employment and Payrolls*, 1943. Comparative employment figures for prior years were: July 1940—49,878; July 1941—64,101; July 1942—65,600; July 1943—87,000.

[39] War Production Board, *Report of the Director of Rubber Programs to the WPB*, November 3, 1945.

the theory that military use of rubber in 1944 would not exceed 1943.[40] Military consumption of rubber and estimates of 1945 requirements increased sharply, however, during the last quarter of 1944. It was estimated that the monthly consumption of rubber for military use in 1945 would be at the rate of 40–45 thousand tons monthly or in excess of 500,000 tons for the year. These requirements were reduced in March and April 1945 as a result of screening by the Rubber Bureau when it became apparent that the war in Europe would end shortly. The increase in military requirements during the last quarter of 1944 and first quarter of 1945 forced cuts in the civilian tire program[41]

Important changes were made in administrative organization in order to meet the production problems of 1944–45. William Jeffers resigned as Rubber Director in September 1943, when synthetic rubber production seemed assured, but just at the time when it became evident that new production problems would arise in 1944.[42] Following this resignation, M. Bradley Dewey became Rubber Director and L. D. Tompkins became Deputy Director, the latter retaining his authority over Operations (Chart II). The Rubber Director, through a newly formed Operations Committee, endeavored to integrate the 1944 production plan with the availability of milling capacity, tire fabrics, carbon black and other components, and manpower. It had been assumed prior to mid-1943 by the ORD that the Facilities, Textile, and Chemicals Bureaus in WPB, the Requirements Committee, WPB, and the War Manpower Commission could and would provide the necessary materials and labor for realizing a production program made possible by the increased supplies of synthetic rubber. The rapid acceleration in total war production during 1943, however, placed limitations upon the ability of the various divisions to expand production as needed.[43]

[40] Consumption of natural and synthetic rubber for the account of Army, Navy, Maritime Commission, and lend-lease was estimated at 1942—250,000 l.t., 1943—320,000 l.t. (excluding 20,000 l.t. exported as raw material), 1944—350,000 l.t. (excluding 104,000 l.t. exported). Stated military requirements for 1944 were as follows, excluding exports of rubber as raw material: *Progress Report No. 4*, Nov., 1943, 436,000; *Progress Report No. 5*, March 17, 1944, 465,000; *Progress Report No. 6*, July 25, 1944, 372,000. The last estimate was based on reported consumption for the first six months.

[41] *Cf.* The Rubber Manufacturers Association, Inc., *Tires at War, 1939–44*. This is the statistical story of how the tires essential for victory were being made. Passenger tire production, which had increased to 6.4 million during the last quarter of 1944, was cut to 3 million during the first quarter of 1945. During subsequent quarters of 1945 it was increased to 5, 7, and 11 million. Manufacturers' shipments of civilian truck and bus tires in April 1945 declined to less than 400,000, below the level of 1943 shipments. After the reduction in military requirements, civilian truck tire shipments were gradually increased to approximately 800,000 by Oct. 1945.

[42] Mr. Jeffers' letter of resignation said in part, "The big job covered by the recommendations of the Baruch report is done. The problem of taking care of the requirements of the armed forces and keeping the country on rubber, meanwhile conserving the nation's stockpile of natural crude, is well in hand, though there is a present and prospective shortage of tire fabric, which is the responsibility of the WPB." Copy of a letter of resignation to the President of the United States, issued to staff members of ORD, Sept. 3, 1943.

[43] War Production Board, Chief of Operations, Critical Programs, *A Report to the War Production Board*, Dec. 7, 1944.

When it became apparent by mid-1944 that the production program would not be realized owing to shortages of components over which his authority was limited, the Rubber Director issued a report recommending that his office be abolished and its major functions carried on by a Rubber Division within the WPB.[44] It was apparent from this report that while the creation of a semi-independent rubber agency had probably speeded up the construction of the synthetic rubber plants in early 1943, it had prevented the proper coordination between bureaus which was necessary for the proper use of that rubber in late 1943 and 1944.

The Rubber Bureau, WPB, established September 1, 1944, assumed the former duties of the ORD with the exception of the responsibility for operation, maintenance, and research in synthetic rubbers, which were transferred to the Rubber Reserve Company. At the request of the chairman of the War Production Board and Justice Byrnes, Mr. John L. Collyer, president of the Goodrich Company, assumed the title of Special Director of Rubber Programs in the WPB on March 21, 1945. In the reorganization of the Rubber Bureau which followed, accurate military and civilian finished products requirements were obtained and arrangements concluded for centralized clearance of orders for tires through the Rubber Bureau. Adequate industry reports were also required showing consumption of raw materials and production and inventories of major classes of finished products. Service during 1945 by Messrs. J. E. Trainer, vice president of Firestone, and R. S. Wilson, vice president of Goodyear completed a record of control of the Rubber Branch by top industry executives which began with the appointment of A. L. Viles, president of the Rubber Manufacturers Association in May 1940, and was continued, after interruptions, by Mr. L. D. Tompkins, vice president of the U. S. Rubber Company, who served during 1943–44.[45]

IV

The effectiveness of rubber controls during World War II can be measured by the degree to which (1) military requirements for rubber manufactured goods were met; (2) civilian transportation necessary to the war effort was maintained; (3) these problems were solved efficiently and with a minimum of interference with other necessary phases of the war program.

Military requirements for rubber goods were fully met during the war years. The Director of Rubber Programs stated in November 1945, "Broadly speaking,

[44] Rubber Director, *Special Report, Recommending Termination of Special Powers*, July 25, 1944. It was emphasized in this report that responsibility over the related programs resided in other WPB bureaus, even though the executive order establishing the ORD had provided for control of "the nation's rubber program in all its phases." The Baruch report had recommended, "full and complete authority in all matters relating to the rubber program." *Cf.* editorial, "Responsibility," *United Rubber Workers*, April, 1945.

[45] By November 1945 the Rubber Bureau staff, at one time expanded to over 500, had been reduced to 78 persons, of whom 17 were on loan from the industry. This staff was assigned the function of continuing controls over the use of natural rubber, maintaining information on tire production, and determining quotas for tire rationing.

no vehicle, military or essential civilian, stood still for lack of tires and no military operation was delayed because rubber equipment was lacking."[46] Military requirements were inaccurate and overstated during the entire war period. This can be attributed in part to a tendency to order more than enough rather than be criticized for ordering too little and in part to difficulties in preparing more accurate estimates of needs.

Continuance of the war in Europe for another year would undoubtedly have necessitated the removal of many essential trucks and automobiles from the road, for the successive shortages of components and manpower and the increase in military requirements had their final effect upon the marginal civilian tire program. The urgent requests for additional facilities for fabrics, carbon blacks, and rubber machinery in 1943–44, based in part upon the planned increase in the passenger tire program, aggravated labor shortages when the strain was greatest upon the nation's production system. These labor shortages had an eventual effect upon the rubber manufacturing industry and precluded full use of the facilities when they became available. Reduced production objectives for new tires, greater emphasis upon recapping and conservation, combined with more moderate requests for new facilities would have satisfied essential military and civilian uses with less interference with the over-all war production program.[47]

A new synthetic rubber industry was created in record time with a plant investment of three-quarters of a billion dollars. Although avoidable delays occurred early in the program, the selection of types of rubber and processes resulted in a high level of production by the end of 1943. The alcohol butadiene plants, forced into the program at the insistence of Senate committees, proved the earliest producers and operated at almost double rated capacity. Based on cost of alcohol at 90 cents and butylenes at 10 cents per gallon, the butadiene produced in these plants cost roughly five times that produced in the petroleum plants.[48] Present consideration is being given to the disposal of these high-cost facilities and to the maintenance of a postwar synthetic rubber industry.[49]

Ceylon rubber, allocated to the United States by the CRMB, prevented the

[46] War Production Board, *Report of the Director of Rubber Programs*, Advance Release, Civilian Production Administration, Nov. 8, 1945.

[47] Based on the weights used in *Progress Report No. 5*, ORD, March 17, 1944, camelback for one passenger recap weighed 8 lbs., while estimated weight of a new 4-ply 6.00 x 16 passenger tire was 22.3 lbs. The priority pattern for rubber manufacturing was shifted in March 1944 to give camelback a preferred position over new tires, when it became apparent that the 30,000,000 passenger tire production goal would not be reached. At the same time, it was necessary to change from Grade C to Grade F camelback for passenger tires owing to shortages of GR-S.

[48] Rubber Reserve Company, *Report on the Rubber Program, Feb. 24, 1945*, Schedule 11. Costs exclude amortization costs. Plant investment per annual ton of production at demonstrated capacity is estimated at alcohol $292, petroleum $544. Schedule 12.

[49] United States Tariff Commission, *Rubber*, War Changes in Industry Series No. 6, Sept. 1944; Interagency Policy Committee on Rubber, *Rubber*, *First Report*. See footnote 18 above.

exhaustion of our natural rubber supply during the year 1943, when synthetic rubber production was delayed. This important contribution was partially offset by our lend-lease shipments of manufactured goods to Britain and Russia, and, after the last quarter of 1943, by shipments of synthetic rubber.

The Western Hemisphere natural rubber program was not a success. Comparison with the record for African production during the period indicates that an equal or greater increase could have been brought about through a well-planned rubber buying program, with little emphasis upon long-term Western Hemisphere development plans, and at considerably less cost.[50]

The record of the administration of the rubber program during the war years is unimpressive. This was the result of the general confusion during a war emergency, the changing nature of the problems, basic deficiencies in the system of controls, and a constant turnover in the personnel administering the program. The creation of an independent agency, as recommended by the Baruch report, had beneficial short-term results, but led to serious problems in 1944–45.

The rubber industry showed excellent foresight in 1940–41 planning for a war emergency. Control of the Rubber Branch by industry executives, however, resulted in constant pressure for increased civilian quotas and added facilities. This confirms the judgment that wartime authority over a critical material should reside in a nonindustry executive assisted by competent industry personnel.

[50] See footnote 8 above. Total production of natural rubber and latex in American countries was in long tons: 1942—31,378; 1943—38,836; 1944—46,711; 1945—44,683. African production during these years was: 1942—30,588; 1943—46,235; 1944—54,920; 1945—53,463.

COLLECTIVE BARGAINING AND ECONOMIC THEORY

WERNER HOCHWALD

Washington University

The shift from individual to collective bargaining is often thought to be the most outstanding social phenomenon of the last decades in all countries where a relatively free market has survived. While the phrase "collective bargaining" originated and has been most sharply defined in the labor market, group-organized direction of business activities can be observed in many other fields. Agricultural cooperatives have established collectively bargained prices for the commodities marketed by their members. A great amount also of large-scale buying and selling among manufacturers or between them and organized retailers has many of the essential characteristics of collective bargaining. In the field of international economic relations the negotiation of bilateral or multilateral agreements has been the rule and free trade the exception.

The collective bargaining process derives its significance from its setting in the larger problem of organized groups within society. Its analysis, therefore, presents special difficulties to an economic theory which has developed the tools of demand and supply functions under the simplifying assumptions of perfect competition in a monistic market. Where individuals have pooled their interests in a few powerful groups the appearance of atomistic competition has given way to organized group action, and the traditional assumptions of a free exchange economy prove of little empirical usefulness. Classical and neoclassical economists believed that the bargaining struggle of many selfish interests would turn private vices into public benefits. But where the many have been replaced by a few powerful interest groups the market may become the scene of "an irrepressible conflict, which economics is unable to deal with, even in theory,"[1] and individual efforts to enhance market opportunities through group association appear to threaten the very existence of competitive norms.[2]

This paper will attempt to explore some of the theoretical issues raised by the growth of collective bargaining, with emphasis placed on the broader implications of collective bargaining for the general drift of economic speculation rather than the formal aspects of bilateral monopoly.[3]

I

Collective bargaining is obviously a development within the general field described as imperfect or monopolistic competition. Phenomena of the labor market prompted Edgeworth to design his famous indifference curves and to

[1] A. B. Wolfe, "Economy and Democracy," *American Economic Review*, March 1944, p. 10.

[2] H. C. Simons, "Some Reflections on Syndicalism," *Journal of Political Economy*, March 1944, pp. 1–25.

[3] On the latter, see J. T. Dunlop, *Wage Determination Under Trade Unions;* also Martin Bronfenbrenner, "The Economics of Collective Bargaining," *Quarterly Journal of Economics*, August 1939, pp. 535–561.

prove that, if two parties engage in barter, the exchange rate between the commodities or services bartered is indeterminate.[4] That is to say, given only the demand and supply schedules of the two parties, it is not possible to ascertain the precise rate at which the exchange will take place, for there are many possible positions of equilibrium where the marginal rates of substitution are equal. The most that can be done is to indicate the limits within which the exchange rate must lie; its actual position within these limits is determined by the relative bargaining strength and resourcefulness of the parties.

It can be demonstrated, of course, that the number of possible equilibrium positions decreases as the number of bargainers increases. With very many buyers and sellers, the contract curve representing all possible equilibrium positions reduces to a single point, and the market appears determinate. Yet even with many buyers and sellers, the determinateness of market equilibrium implies that the actions of the different persons trading are consistent. In other words, the individual must acquiesce in the role assigned to him by the given market constellation and accept the opportunities open to him without attempting institutional change: he must accept the "rules of the game."[5] The classical definitions of free competition all involve further postulates besides the great number of traders, for they all exclude the free play of associations formed by any or all types of participants for the very purpose of changing the rules of the market. But in a dynamic social organism individuals do attempt to improve their legal bargaining status, and these very efforts have led to new forms of group loyalty and collective bargaining.

The trend toward collective bargaining then has enforced a reconsideration of competitive theory. A new generation of economists has come to think of industry as "a world of monopolies,"[6] where curves of demand and supply tell nothing, either by themselves or by their intersection, as to what price will be established until other conditions are known: "they are, so to speak, landmarks, but no more."[7] With many buyers and sellers, marginal revenue is equal to price, and the price which equates aggregate demand and supply is therefore the only one which is consistent with maximum profits for every seller in a given market: the purely competitive market, supposing a consistent behavior pattern of all parties, is determinate. With a limited number of buyers or sellers, marginal revenue is not equal to price, and the equilibrium position of the individual trader is therefore distinguished from the equation of aggregate demand and supply. Yet this very fact renders the market indeterminate.

Once the market has been recognized as indeterminate, many concepts of traditional economic doctrine lose their logical cogency. Neoclassical economists thought that marginal productivity offered the basis for a scientific theory of distribution, and even an objective criterion of distributive justice. But pro-

[4] F. Y. Edgeworth, *Mathematical Psychics*, London, 1881, pp. 20–30.

[5] John Von Neumann and Oskar Morgenstern, *Theory of Games and Economic Behavior*, p. 49.

[6] Joan Robinson, *The Economics of Imperfect Competition*, p. 307.

[7] Edward Chamberlin, *The Theory of Monopolistic Competition*, p. 15.

ductive agents are paid according to the value of their marginal products only under the assumptions of pure competition, where the producing unit finds its equilibrium at the minimum point of its cost curve. For only with constant returns (and constant average costs, as is true for small deviations from the minimum point on the cost curve) will the sum of the marginal products of the various productive services times their respective quantities equal the total product.[8]

The all-pervasive presence of monopoly elements, greatly extended through the practices of collective bargaining, has also affected the traditional doctrine on the scale of production. Under conditions of pure competition each individual firm is supposed to be of its most efficient size, determined by the technical production function of industry. But monopoly elements interfere with the adjustment of productive services to variations in output and prevent the mutual substitution of productive agents at the margin. The presence of overhead leads to unused capacity and discrepancies between average and marginal cost per unit of output, permitting entrepreneurs a latitude in shaping their price and production policies within limits which are broad and cannot be defined by standards of pure competition. The function assigned by neoclassical equilibrium theory to cost as a measure of economic soundness is thus vitiated.[9]

The apparatus of demand and supply schedules, designed originally to find definite laws of market behavior, has become the very tool to prove the indeterminacy and institutional relativity of a market where individuals and groups do not accept their given market status like inert links in a mechanical chain of economic causation but jostle for institutional changes to grant them more security and power. While recognizing that the physical data of demand and supply impose limitations upon absolute freedom of action, there remains a wide range of choices open to the individual and his community. The basic choice is made by the community when it defines the monopoly power of each individual by stipulating his legal status in the market, itself the result of an intricate, never ending political bargaining process. Within this institutional framework of the market the individual monopolist will choose among the alternatives open to him on the strength of his estimates as to the course which other monopolists will pursue in given situations.

By accepting the market institutions of their time as given, and excluding the free play of market coalitions, neoclassical economists could agree on many fundamentals in their assumptions and conclusions. Recent theories of monopolistic competition, having shown the futility of treating the market as uniquely determined by individual supply and demand functions, necessitate a refined statement of institutional assumptions. Institutional data determining market price may either be stipulated as constants, or assumed to be variables, autonomous or induced. In either case, the great variety of possible assumptions ac-

[8] For a mathematical demonstration: Erich Schneider, *Theorie der Produktion*, Vienna 1934, pp. 19–21.

[9] J. M. Clark, *Preface to Social Economics*, p. 220.

counts for the "wilderness of opposing views, not to say shouts, of competing economists."[10]

As to the prospect and significance of institutional changes in the field commonly described as collective bargaining, the many divergent views of contemporary American economists may be grouped under three headings.

1. First, there are the Keynesian New Dealers. These economists associate many phenomena of collective bargaining with the aspects of a "mature economy." The passing of the frontier and the slowing of population growth are narrowing the opportunities of individual advancement which existed in an expanding economy. It is through group association that the individual seeks protection and security in a shrinking market, which in turn implies an ever growing influence over the price mechanism, which cannot any more be expected to provide automatic incentives for private investment and full employment. Viewing these developments as irreversible historical trends, a more vigorous participation of government in economic affairs appears inevitable, with "a choice only between democratic planning and totalitarian regimentation."[11]

2. Second, there are the Collective Bargainers, who expect new opportunities for economic expansion from the very development of functional interest groups in a system of self-controlled business. While recognizing secular changes in the conditions of external and internal expansion these economists assume that collective bargaining between functionally equal parties may prove the mechanism best suited to adjust the market to these changes, for centralized government as a directive agent appears unable to discover and attain those distinctive ends of economic life which only the actual participants in an enterprise confronted by a concrete situation are capable of formulating. According to this view, objective values in a world of change "are most surely to be approached through the operations of spontaneously affiliated functional interest groups, democratically organized for the declaration of the interest held by members, and for bargaining methods of discovering the most practicable means for simultaneous realization of the largest number of such interests or for the revision of claims and redirection of effort in the light of better understanding of operative possibilities and needs."[12]

3. Third, there are the Free Traders, who defend the superiority of individual bargaining in a free market. These economists, too, recognize secular changes of the institutional market structure and the need for some monopoly protection in a world where pure competition and perfect fluidity of prices could only mean utter chaos and insecurity. Yet they claim that the old dogma of the free market has always implied the continuous adjustment of social instititions to the changing conditions of economic expansion with the goal of diffusing managerial control among the masses and compelling individual action for the common good. Concentration of power in government or functional interests groups is assumed

[10] C. E. Merriam, *On the Agenda of Democracy*, p. 104.

[11] A. H. Hansen, *Fiscal Policy and Business Cycles*, p. 47.

[12] E. G. Nourse, "Collective Bargaining and the Common Interest," *American Economic Review*, March 1943, p. 18.

to curtail output and employment, while individual bargaining in a reasonably competitive market is thought to drive the business unit—as the intermediary between consumers of finished goods and sellers of productive services—toward maximum efficiency in the community interest. The ideal state would thus be charged mainly with a careful definition and enforcement of the legal market framework "to assure that systematic dispersion of power which is the only guaranty of liberty at home and the only hope of enduring peace for the world."[13]

This divergence in the appraisal of the advantages or dangers of collective bargaining due to different institutional assumptions, which in turn are based on fundamental differences in social philosophy and historical speculation, invites further investigation. The purpose of this article is to find a new focus that might be given to the discussion of monopolistic competition under a particular body of limiting assumptions different from the traditional postulates of classical doctrine and more appropriate to an analysis of the concrete issues presented by collective bargaining. Any such attempt must mainly be concerned with redefining the determinants of the market.

II

In neoclassical analysis consumer's demand and factor supply were the ultimate determinants of a market tending toward equilibrium at the point where all the individual utilities and productivities were maximized. This analysis implied that the actions of the different persons trading were consistent: each trader must be convinced that he can reach his optimum position only through rational market behavior and, furthermore, must be able to act in a rational way. All this seemed assured through the assumption of perfect competition, which would enforce rational and consistent action under pain of elimination. Perfect competition permitted traditional economic theory to take market consistency for granted and to ignore any other determinants that might stimulate—or interfere with—this harmony of conduct. In a free market, economics could safely leave the character of social ends as such uninvestigated and concentrate on the relationship between random wants and scarce means: it became "the science which studies human behavior as a relationship between ends and scarce means which have alternative uses."[14]

During the greater part of the nineteenth century in the English speaking world this approach was entirely sound and justified, not because the actual market was free from legal restraints or perfectly competitive to any large extent, but rather because there was this very integration of ultimate ends which assures market consistency. Business flourished within the institutional and spiritual framework first laid out by the mercantilist's dream to make the nation great, a framework well adapted for rapid capital accumulation to satisfy the demands of an unprecedented population growth and territorial expansion. Nineteenth-century English economic liberalism had a universal appeal to a generation which

[13] H. C. Simons, "Trade and the Peace," in *Postwar Economic Problems*, by S. E. Harris (ed.), p. 155.

[14] Lionel Robbins, *An Essay on the Nature and Significance of Economic Science*, p. 16.

believed in linear social evolution and a rising standard of life through the rational action of free enterprise, an institution which had proved such a singular success in the passionate appropriation of the earth by means of those enthusiastically welcomed and fondly cherished byproducts of science, the innumerable modern inventions.

Economic historians, of course, remained aware of how much the nineteenth century market owed to the ideas and aspirations of the mercantilist regime. But the critical attitude of the classical school toward their mercantilist predecessors, typical of that temporary eclipse through which the reputation of every generation seems to pass and from which it recovers only when it is seen in a longer perspective, let economists ignore "that what they were building up was not universal truth, but machinery of universal application in the discovery of a certain class of truths."[15] Not that neoclassical analysis (best represented by Marshall, whose genius has come to stand, among economists, for the greatness and simplicity of the Victorian Age) was unmindful of institutional changes. On the contrary, the Marshallian distinction of external and internal economies[16] as well as the refusal to view the concrete actions of economic life solely as means to want satisfaction[17] showed a deep insight into the historical dynamics of the market. But these dynamics themselves were conceived as uniquely determined by the trends of development in the late nineteenth and early twentieth century, pointing in the direction of technological progress and increasing economic prosperity through the rational action of free enterprise. Neoclassical discussion of consumer utility and the principle of substitution, therefore, remained limited to the relationship between random wants and scarce means, based on rational choice and analytical independence of ends.[18]

Surely that society must have seemed very stable and very secure in which scholars could imagine that market integration and consistency might be taken for granted, independent of ends and the ultimate social goals the market was destined to serve. In this happy environment, economists appeared justified to search for the element of order in economic relationships on the level of means only, while, in the general field of the social studies, to avoid controversy and judgment on ultimate ends and values became the very ideal of scientific detachment in the ascertainment of objective truth. Agreement on basic assumptions among scholars reflected agreement on fundamentals within the broader community of the market where harmony of conduct on the part of all traders justified the classical assumption "that the aggregate demand price (or proceeds) always accommodates itself to the aggregate supply price,"[19] in other words, where competition between entrepreneurs would always lead to full employment.

But a society that feels itself to be faced with imminent revolution—a prospect

[15] Alfred Marshall, "The Present Position of Economics" (1885) in *Memorials of Alfred Marshall* by A. C. Pigou (ed.), p. 156.

[16] Alfred Marshall, *Principles of Economics*, p. 266.

[17] *Ibid.*, pp. 88-91.

[18] For an exposition of Marshall's place in the history of social thought, see Talcott Parsons, *The Structure of Social Action*, pp. 129-177.

[19] J. M. Keynes, *The General Theory of Employment, Interest and Money*, p. 26.

that the last three decades have offered to sensitive minds—will muster its forces to reaffirm in such fashion as it can the ultimate ends and values upon which its way of life depends, and in such a case disagreement among scholars will only reflect the basic insecurity of a community which has experienced the frustration of deep depression and two world wars. In this crisis, there has been a call for social scholars to reconsider "the intrinsic values of life in a civilized, democratic society":[20] peace, liberty, security, and equality of opportunity. To break down the line fence between the social studies and moral philosophy, it is hoped, will enable economists again to agree on basic principles, while consciousness of the ultimate values common to the community will integrate the behavior of the parties in a shifting market pattern and thus create the conditions necessary for full production and full employment. But here immediately a new difficulty arises. For scholars and the community they serve do not disagree on the fundamental values of liberty, security, and democracy. They rather disagree on "instrumental values":[21] the means to attain those ultimate ends and social goals of man and his community.

The fundamental question is just this: different social institutions appear to different scholars and groups of the community best designed to realize those intrinsic values of life which constitute ultimate social ends. Wherever some inconsistency of the current instrumental values—some inconsistency between present institutions and community aspirations—is evidenced through social tension and distress, the proper adjustment of, and a new compromise on, instrumental values, therefore, is the real point at issue. For while divergent interests will attach incompatible meanings to their claims for liberty and security, ephemeral human beings can but identify their ideals and hopes for a better world with the relative permanence of a self-perpetuating group or institution like the family, the church, the political party, the free market, the trade union, the national state, social institutions to guarantee that maximum amount of individual freedom, security, and opportunity which can be attained only by mutual concession and compromise.

Now there can be little doubt indeed that these groups and institutions will become special pleaders for their members' selfish interests, using verbal camouflage to elevate their particular ambitions to the dignity of final values, just as individuals like to identify their private interests with the public good. But though all this may be conceded, it is only through these groups and institutions that man can identify his little self with the larger world of which he is such an ephemeral part; and since the lives of men, if they are to be lived with even a small measure of satisfying conviction, cannot dispense with this emotional attachment to some social group and institution, there is no sharp dividing line in the individual's consciousness between particular and general interest, between instrumental and inherent value.

The scholar has to accept group emotion and group loyalty as his social data, and

[20] Wolfe, *op. cit.*, p. 3.
[21] *Ibid.*, p. 2.

to the economist these data become the final determinants of the market, for these irrational forces integrate the individual demand and supply schedules into the aggregate demand and supply functions which determine "effective demand."[22] These are the data that determine the individual's choice among the many alternatives open to him in an otherwise indeterminate market. They determine the economic "horizon"[23] of the traders in the market, the period over which the parties wish to maximize their profits, a period which, with strong group affection, may last far beyond a single lifetime and include supreme, self-sacrificing action prompted not by deliberate cerebration but by the unreflecting movement of the heart. They determine the expectations of business, its confidence in the stability of the existing order, its investment policy, its production policy, its price policy. These data, above all, determine the inner consistency of the institutional pattern and the extent to which a free market can serve the common good.

Seen in this perspective, collective bargaining, far from being beyond the scope of economic theory, is a constant challenge to the economist to explore more fully the interaction of rational and irrational forces in the market. For the process of group bargaining makes explicit and calls attention to those market elements of potential conflict and opposing interests that are always present though they may be temporarily hidden during those happy times of general exaltation when all groups rally to the support of one powerful institution which represents and integrates their common scheme of values. The overwhelming power of the national state and the emotional forces of modern nationalism have built the market of economic theory and set its limitations, except for that "somewhat miraculous period"[24] when English economists converted their community to the general principle of free trade in a world market.

Collective bargaining challenges economic theory to include in its speculations those factors which prompt people to identify themselves with their family, their trade, their class, their nation. For the involved complex of attitudes based on a psychological identification of the individual with larger collective units determines the institutional dynamics of the market, and it is the task of the economist to analyze these attitudes formed by an intricate blend of the quest for immediate selfish advantage and ultimate social values. Where divergent group interests and loyalties lead to market inconsistency and economic stagnation, it is incumbent upon the economist to discover the most practicable means and to suggest the best acceptable compromise for simultaneous realization of the largest number of such interests. Where the negotiating parties follow the technical procedures of collective bargaining, this task is obvious. But whatever the social organization of the market and economic life, to solve institutional dead-

[22] Keynes, *op. cit.*, p. 25.

[23] Jan Tinbergen, "The Notions of Horizon and Expectancy in Dynamic Economics," *Econometrica*, July 1933, p. 247.

[24] Jacob Viner, "International Economic Relations and the World Order," in *The Foundations of a More Stable World Order*, by W. H. C. Laves (ed.), p. 39.

lock and to overcome the inconsistency of instrumental values by demonstrating the common interest of divergent factions in ultimate social ends appears the central concern of economics as a purposive science.

The purpose of any group action is to tilt the demand curve for the prices or products offered by the members of the group, in other words, to escape the competitive pressure of a perfectly elastic "sales curve."[25] Measured by the yardstick of perfect competition, such action is always deleterious for it tends to restrict output and thus to impair the maximization of the national income. But once the very concept of perfect competition is abandoned as an unrealistic abstraction, the answer becomes less obvious. For some monopoly protection may actually stimulate output through encouraging investment in new capital, new skill, new knowledge, [26] a fact that has always been recognized by the patent laws, though the very history of patent monopolies in turn suggests how difficult it is properly to assess the relative advantages and disadvantages of such monopoly protection.

The apparent contradiction of increased output with a tilted sales curve is explained by the neglect of the time factor in our static demand and supply analysis. Resource productivity may possibly be increased as a result of the protection collective bargaining gives to the members of the group. Whether it actually will be increased depends on the extent to which the group identifies its own immediate advantages with the long-run interest of the community. Such identification is most likely to occur within very large groups whose membership represents wide sections of the community faced with a highly elastic demand for its services as a whole. Some economists have therefore come to favor nation-wide organizations which are big enough to concern themselves with the general welfare rather than sectional interests. The federations of labor, it is claimed, have an interest in a well-balanced wage structure, in contrast with the attempts of certain strong individual unions to push the wages of their members too high for the good of labor as a whole.[27] Likewise, general business associations are hoped to eschew the restrictionist ideas or policies of narrow trade interests.[28]

Yet while the real interests of large groups cannot help being identical with the long-run aspirations of their community, their short-run policies may be shaped by a misconception of the "objective" demand curve for their members' services, where it is recognized, of course, that this "objective" demand curve itself can only be a matter of speculation. With the assumptions of perfect competition, all these difficulties are avoided, for the trader can ignore his "objective" demand curve only at the immediate peril of elimination. But in any theory of imperfect competition or collective bargaining, the distinction between "objective" and

[25] This follows the terminology of Robert Triffin, *Monopolistic Competition and General Equilibrium Theory*, p. 5 n.

[26] J. A. Schumpeter, *Capitalism, Socialism, and Democracy*, pp. 81–86.

[27] S. H. Slichter, "Public Policies and Postwar Employment," in *Financing American Prosperity*, by P. T. Homan and Fritz Machlup (ed.), p. 320.

[28] E. G. Nourse, *Price Making in a Democracy*, p. 416.

"subjective" demand curves, or between ex-ante and ex-post phenomena,[29] is fundamental.

Consistency of market behavior, and therefore reasonable conformity of ex-ante expectations with ex-post reality, is basically determined by the social stability of the community. The classical economists had taken this consistency for granted through their stipulation of a perfect market. The modern economist, faced with the realities of the collective bargaining process, has to follow a more sophisticated approach in his analysis of market forces. If group aspirations and loyalties are recognized as market determinants, the central problem appears to be how to organize these monopolies so as to insure community stability without impairing institutional changes and technical innovations conducive to economic progress, in other words, how to harmonize immediate short-run pressures with the conditions of long-run equilibrium.[30]

"Expectation as determining output and employment"[31] has been emphasized in recent discussions of economic dynamics, "where every quantity must be dated,"[32] especially in the analysis of aggregate price and production functions, sacrificing—more or less explicitly—the assumption of perfect competition. For expectations can determine output and employment only where there are real alternatives, and there are real alternatives only in a monopolistic market. Marshall has classified markets "with regard to the period of time which is allowed to the forces of demand and supply to bring themselves into equilibrium with one another."[33] His famous tripartite division (temporary equilibrium, short period, and long period)—clarified in its relation to both value and distribution phenomena by Professor Knight[34]—has not been retained in the recent attempts toward a more general theory of dynamic economics. Yet it brings out quite forcefully the institutional implications of expectations and the time factor in the market. For any shift in the given supplies of consumption goods or productive services—the basis of Marshall's market classification—implies a shift in the market status of those who offer these goods and services and with it some institutional change.

In the competitive market of classical doctrine, by definition, no trader has a status, and therefore a shift in resources does not imply institutional change. But in the monopolistic market it does, and the range of alternatives open to the parties greatly increases. Every trader forms his business expectations not only within the given market framework but also fashions his "institutional horizon," comprising his expectations as well as his interests in future changes of the social structure; and traders differ not only in their immediate "competitive" trade

[29] This terminology has been developed first for purposes of business cycle analysis; see Bertil Ohlin, "Some Notes on the Stockholm Theory of Savings and Investment," *Economic Journal*, March 1937, pp. 53–69.

[30] J. M. Clark, "Toward a Concept of Workable Competition," *American Economic Review*, June 1940, pp. 241–256.

[31] Keynes, *op. cit.*, p. 46.

[32] J. R. Hicks, *Value and Capital*, p. 115.

[33] Marshall, *op. cit.*, p. 330.

[34] F. H. Knight, *Risk, Uncertainty, and Profit*, pp. 142–144.

interest but also in their "institutional horizons." Those whose status is identified with the very resources to be shifted—e.g., a craft union or a firm with heavy capital investment—will obviously form an "institutional horizon" different from those who stand to gain by a reallocation of productive agents. Now some agreement about the "institutional horizon, " about the degree and direction of shifts in the market framework, appears necessary to assure that long-run full employment equilibrium which in the classical model of a perfectly competitive market is taken for granted. For a permanent divergence of "institutional horizons" in a monopolistic market cannot be adjusted through piecemeal changes of the social structure but leads to that paralyzing "balance of class forces"[35] which destroys the market with all other free institutions.

To minimize the dangers that flow from conflicting "institutional horizons" of monopolistic trading groups and the resultant inconsistency of market behavior, economic theory is challenged to define the proper bargaining unit.

III

In the competitive market all parties are equal, and the problem of the proper bargaining unit does not arise or, perhaps better, is excluded by definition. In the monopolistic market it becomes the central problem of social organization.

The competitive market, of course, has always been more than a mere abstraction for purposes of economic analysis. It has been the social ideal of institutionalizing the dispersion of power among all the members of the community in such a way as to integrate individual opposing interest toward maximizing the common good. The premise of a competitive market—and of any free market—is therefore the integration of opposing interests in the market by their parallel interests in maintaining the very institution of the market. But the integration of opposite and parallel interest in the monopolistic market takes on much more complex forms than the simplified model of a competitive market suggests.

In the competitive market there are only two stages: opposite competing interests in the market and parallel common interest in observing "the rules of the game." In the monopolistic market there are many intermediate stages where the different traders regroup themselves into new pairs of combining and competing interests. One such intermediate stage is of so paramount importance for any social organization that no economic theory could afford to ignore it: the business unit "combines" competing productive agents and then competes with other firms in the sale of their finished product; it thus separates factor and product markets. Classical and neoclassical doctrine, based on the assumptions of pure competition, endowed the business unit with peculiar productive power of its own, competing with other resources whose classification as land, labor, and capital was conceived to be independent of the institutional framework. Such treatment suggested itself as long as the "entrepreneur" could be identified as the profit receiver. But the historical phenomenon of a "multiple executive" has

[35] This phrase was coined by the Austrian political leader Otto Bauer; it well describes the historical situation on the European continent before the advent of fascism.

brought the charge that "economic theory does, in fact, contribute confusion by its association of the entrepreneurial function with the receipt of profits, by its tendency to handle large and small business units in one conceptual scheme, and by its frequent identification of entrepreneurship with capitalism."[36]

The business firm is an institutional device to realign productive agents locked in the "competitive struggle" among different sellers of resources so as to face united the consumer in the "bargaining struggle"[37] between seller and buyer of finished goods. Such regrouping of market interests serves the common good as long as it increases the total utility offered in the market. There can be little doubt that the business firm is more efficient in producing final utilities than the individual consumer buying individual productive agents could possibly be. But the most efficient size of the firm—"most efficient" not only from the point of view of the individual business but rather for the community as a whole—cannot be determined by reference to some technical "production function"[38] which itself is dependent on the institutional definition of productive services, and the advantages as well as disadvantages of horizontal or vertical combination remain vexing questions of public policy in the social control of industry.

The traditional analysis of the firm relied on the formula that "each firm tries to maximize its profit." Under purely competitive assumptions, this formula became also the ethical justification of free enterprise, designed to represent most effectively the community interest in the competitive struggle of resources. In the theory of monopolistic competition, "the firm is a mere abstraction,"[39] lacking in ethical content. It enjoys legal status because of its function to integrate and regroup the conflicting interests of consumers, entrepreneurs, owners, and workers so as to serve best the common good. Yet there is an infinite complexity of alternatives to fulfill this function, and the dispersion of managerial controls in private business as well as public administration suggests the variety of institutional setups in the evolution of entrepreneurship.

The firm is only one illustration of the many intermediate stages where opposite and parallel market interests are redefined. All the factors of production bear the institutional stamp of the country and time in which they prevail. Land, labor, and capital enter the market first to represent their individual owners, in combinations which reflect the personal distribution of national wealth and knowledge. But here again the market may present an infinite variety of splitting or combining these resources through one or more individuals, partnerships, associations, and corporations. The legal concepts of personal liberty and property thus get their very content from the community interpretation of the conditions under which private resources may seek employment and protection in a public market.

[36] A. H. Cole, "The Research Program Sponsored by the Committee on Research in Economic History," *Journal of Economic History*, May 1944, p. 58.

[37] This terminology has been suggested by Milton Handler, "Unfair Competition," *Iowa Law Review*, January 1936, p. 203.

[38] For a brief discussion of the production function, see G. J. Stigler, *The Theory of Price*, pp. 109–115.

[39] Triffin, *op. cit.*, p. 186.

In the labor field, the problem of defining "the unit appropriate for the purposes of collective bargaining"[40] has found explicit statutory recognition. But the task of finding the appropriate bargaining unit is not limited to labor, and it is not limited to the phenomenon of collective bargaining. It is rather a universal problem of market organization where the alignment of opposite and parallel interests is necessarily determined by the legal definition of a "person."

All this serves to emphasize the inherent formality of collective bargaining as such. Every bargain is a collective one in the sense that it draws its final validity from some community definition and sanction of the parties in the market and therewith of the bargaining unit. The problems of collective bargaining cannot be clarified by contrasting them with those of individual bargaining. Effort must rather be made to establish some yardstick, some test of relevancy for the fundamental issue common to both: the definition of the appropriate bargaining unit.

IV

The fundamental consideration in defining the bargaining unit must be to assure reasonable consistency of market behavior, so that short-run pressures work in the direction of long-run equilibrium and ex-ante expectations conform with ex-post reality. The bargaining unit must permit the parties to have their attitudes, their interests, their scale of values represented in, and reflected through, the market so that they develop a roughly parallel "institutional horizon." In a democracy, the actually felt interests of the parties to economic life have many chances for realistic expression. But even if we assume that all groups are frank in divulging their information, their feelings and preferences, in any strict sense these attitudes are largely unknown even to the parties at interest. They have to be discovered in the very process of continuous market adjustment, for they embrace the irrational value judgments of the nation's citizens. Being indefinite in the citizen's own mind, there will always remain some element of the market to be found not as objective truth but as the observer's moral conviction on what ought to be his community's scale of values.

Tests of relevancy therefore represent personal judgments. But economists who want to transgress the ethical barrenness of pure theory and wish their analysis to be directly relevant to policy choices cannot help making personal judgments about the values to be realized through the market. For the purposes of this paper two very general assumptions appear justified. First, American public opinion will insist on reasonably full use of resources. Second, "our liberal conception of society, which finds purposive life in the individual, with association a means for the support and enrichment of autonomous individual life,"[41] will continue to receive strong support.

These two ideals—full employment and individualism—appear inconsistent to the extent that only authoritarian controls can assure a job to everybody at any

[40] National Labor Relations Act, 1935 (49 Stat. 449), Sec. 9.

[41] F. H. Knight, "The War and the Crisis of Individualism," in *Economic Problems of War and Its Aftermath* by C. W. Wright (ed.), p. 142.

moment of time. But in their deeper meaning the two ideals are complementary, for only a society that knows how to organize the use of its wealth and its talent can assure the survival of individual freedom, while only a free society will stimulate those individual efforts which make for "efficient" use of resources. The student of the market has the never ending task to suggest those adjustments in the status of the parties, those redefinitions of the bargaining unit, that promise to facilitate the attainment of these twofold yet interrelated ideals.

More specifically, every price economy is faced with the problem of how to reconcile that minimum security, that "monopolistic" market status every individual needs for his planning, with the danger of creating "vested interests," of impairing new opportunities so as to produce opposite "institutional horizons." The nineteenth century market attempted to integrate these considerations and ideals in the following way: First, there was that fundamental principle of "competition" to define the bargaining unit small enough so as to disperse market power and to minimize the danger of opposite "institutional horizons." Yet, second, to facilitate business planning and investment, there was extended strong protection to private property, especially as it was embodied in that peculiar bargaining unit, the firm, conceived as the community's agent in the growth of industry. Again, third, the content of private property was limited by the principle of "free entry," even if that meant the competitive destruction of previous investments. Finally, fourth, "private" planning and investment was greatly facilitated by the feeling of international security, the "open frontier" not only in the geographical sense but, much more important, in its political implications.

In the world market, the twentieth century saw the end of reasonably parallel "institutional horizons," and with it a great increase in the difficulties of domestic market adjustments. The fateful cumulative interaction of national and social tension led to the fascist state, culminating in the Nazi "New Order." The war having been won by the United Nations, there is hope that a new world organization will again facilitate not only foreign but also domestic bargaining in a free market. Great, though, as the contribution of foreign trade to internal adjustments may be, it can be argued with much force that—this country being the dominant postwar nation—"the peace will be won or lost in the field of American domestic economic policy."[42]

In the home market, the twentieth century saw a growing criticism of that special bargaining unit, the business firm. Its protection—protection from foreign competition, protection from domestic competition in the sale of its product, protection of its status as buyer of resources—was thought to interfere with consistent market behavior by creating "vested interests"; while now, in turn, new combinations of resources, which developed through trade unionism and other group action, are held to impair the market status of the firm to such an extent as to destroy its usefulness as an agency for private planning and investment.

It is in this area then that the great battles for redefining the bargaining unit

[42] H. C. Simons, "Some Reflections on Syndicalism", *Journal of Political Economy*, March 1944, p. 25.

are fought. Without entering the question whether business today is relatively "bigger" than it was 100 years ago, there is common agreement that modern industry in many fields is carried on in units too large to give the concept of "free entry" much practical validity. In this sense, then, the nineteenth century market has failed to accomplish, or at least to maintain, its fundamental purpose to diffuse power. Four remedies suggest themselves and have all played a part in redefining the market status of the firm. First, there is the possibility of breaking up too large units, the traditional goal of antitrust policy. Second, if the firm is maintained as a large unit, its internal organization may assure that diffusion of power and sharing of entrepreneurial functions which originally the competition with other firms was thought to accomplish. In other words, the business unit is recognized more definitely as an intermediate stage in the bargaining struggle, as a small market of its own within the national market of which it has become so large a part. Third, and closely related to the second point, the resources employed by business may gain in market status so as to match the growing size of the firm and to redefine "management's right to manage."[43] It is here, of course, that the phrase "collective bargaining" has originated. Fourth, "free entry," while having lost its original implications, may be preserved not only in the internal organization of the firm but also in the sense of permitting and encouraging technical innovation as well as substitute products.

These attempts toward redefining the proper bargaining unit receive their perspective from the intricate interrelations of all industrial markets. What suggests itself as an appropriate measure in the particular environment of "big business" may have far-reaching repercussions on other industries. Once employed resources have been redefined to match the large firm, they are bound to carry this new organization into other fields where their very size now will enforce new adjustments of "small business." This phenomenon has been viewed with particular concern in the labor market where some observers feel that "labor monopolies and labor states may readily become a problem which democracy simply cannot solve at all."[44]

The appropriate bargaining unit for labor is partly determined by the institutional arrangements in other markets just as it in turn will influence the remaining social structure. Only great confidence in the desirability and efficacy of antitrust action to the exclusion of the other remedies mentioned would permit the reliance on small labor units without endangering that diffusion of power which is essential to economic liberalism. But with large labor units insistence on "internal" competition and free entry are important, just as in the case of the large business firm. "Internal" competition may be intraunion or interunion or both; it implies not only a democratic union constitution but also some reconciliation of incentives with seniority rules. Free entry means more than the lack of arbitrary limitations on membership. It involves—just as in the case of the

[43] For a brief summary of management's and labor's current attitude on these problems, see *The President's National Labor-Management Conference*, Washington: United States Department of Labor, 1946, pp. 56–62.

[44] Simons, *op. cit.*, p. 4.

business firm—the difficult problem of assuring outside competition from substitute products or services by limiting union jurisdiction to a specific trade or industry. With the growth of labor's bargaining power the need increases for constructive action in jurisdictional and other interunion disputes, leading towards a new "plane of competition" among labor units somewhat analagous to the trade practice rules of business.

These sketchy remarks only serve to suggest the complexity of defining the proper bargaining unit, in the labor market as elsewhere. In each case, the very concept of the bargaining unit is of a multiple order. There is the primary problem of the immediate unit involved in the contract, in union parlance the "local," bringing to mind the familiar discussions of employer unit, craft unit, plant unit, and so on. But there is also the secondary question of defining the proper "national" of which this "local" is a part, of defining the proper "industry" of which the firm should be a part, questions of great relevancy to demark the different planes of competition between substitute processes and products. The problem is well reflected in the legal efforts to establish some line of distinction between "primary" and "secondary" boycotts.

While stressing the interrelations among different markets it should be pointed out that market consistency—and with it "full employment equilibrium"—cannot be accomplished by the simple device of uniform bargaining units in a corporate economy where individuals are forced into functional representation without choice or alternatives. While possibly conducive to the "particular equilibrium" of one industry, such a scheme may lead to serious disequilibrium in other parts of the economy. The merits of "industry-wide bargaining" are easily overestimated[45]; cartels, even if embellished by the name of "union-management cooperation," are a poor substitute for economic stability, and the "alarming identity of interest between organized workers and employers" as "a rising barrier to entry of new firms, as well as to entry of new workers"[46] has been well emphasized. The very complexity—and sometimes troublesomeness—of differently defined units for various resources has its advantages, if not for the particular equilibrium of one industry, yet for the general equilibrium of the community, because it tends to lessen the dangers that flow from a misconception of the long-run "objective" demand curve for the services offered by organized monopolies.

Some overlapping in the definitions of the proper bargaining unit, in the organization of industry, of trade, of labor, of agriculture, of consumer interests, only reflects the variety of group loyalties, of free associations, in an individualistic society. Common "institutional horizons" just presuppose that the individual does not fully identify himself with any one institution of the larger social universe which the economist calls "the market." The free citizen takes a simultaneous pride in "his" family, "his" firm, "his" trade, "his" community,

[45] For interesting comments on this point, see S. H. Slichter, and R. J. Watt, in "Report and Recommendations of the Labor Committee," *Trends in Collective Bargaining* by S. T. Williamson and Herbert Harris (ed.), pp. 232–233 n.

[46] Simons, *op. cit.*, p. 14; also Leo Wolman, "The Area of Collective Bargaining," *Political Science Quarterly*, December 1944, pp. 481–488.

"his" nation; only these multiple attachments make possible the paradox of liberty with interdependence.

Collective bargaining, then, involves the definition of all those many intermediate stages where market interests are regrouped better to represent the parties' scale of values. It means the giving up of that simplified one-dimensional market model where only opposite interests meet. It replaces the simplicity of one "competitive" market by distinguishing a great variety of interrelated competitive planes within the larger "monopolistic" market, reconciling some security of "status" with the need for dispersion of power. It recognizes many levels of "internal" competition within the bargaining unit—the various competitive planes—of the larger market, and the definition of this bargaining unit will depend on some personal judgment as to the social advantages and disadvantages of "internal" as contrasted with "external" competition.

The definition of the bargaining unit necessarily becomes a major determinant of the total market and price structure. To combine the two ideals of individualism and full employment, the market must reflect the community's scale of values and distribute the gains of rising labor productivity so as to assure a continuity of effective demand and investment opportunities. Traditional analysis assumes "price competition" to press for productivity gains as well as their prompt redistribution among the traders in the market. In an environment of widespread collective bargaining the introduction of more efficient production methods as well as the distribution of any increase in total output becomes the matter of negotiations between organized monopolies, and short-run pressures are likely tlo lead towards long-run full employment equilibrium only if these monopolistic bodies "cooperate" in the recognition of some common interest. But this apparent difference must not obscure the fundamental issue that "cooperative endeavor . . . is most likely to have its roots in competitive struggles between firms"[47] and industries. Disregarding the patriotic pressure of an all-out war effort, competition in the product market is still the main force which can be counted upon to lead to factual rather than emotional collective bargaining in the factor market. Modern theory of monopolistic competition, therefore, must continue to search for those competitive pressures that are most likely to guide self-seeking individual and group initiative towards the common good. But Adam Smith's theory of the unseen hand, that private selfishness automatically works public benefit, has been supplemented by a more sophisticated recognition of the multifarious forms competition may take within and between monopolistic trading bodies, where the definition of the bargaining unit has to take account of group loyalties so as best to harmonize short-run pressures with the forces of long-run equilibrium.

The community's scale of values, as interpreted by the scholar's own value judgment, will guide the economist in his suggestion of a group compromise most conducive to the common good. Those who appraise high the nation's attachment to the ideals of "free enterprise" in the sense of small business units

[47] F. H. Harbison, "Some Reflections on a Theory of Labor-Management Relations," *Journal of Political Economy*, February 1946, p. 15.

will recommend most concessions to be made by those institutions which tend to monopolize certain sections of the market. Those who appraise high the group loyalties attached to associations guaranteeing some security to their members will attempt to replace new liberties for old through the democratic organization of bargaining monopolies. Those who appraise high the community's confidence in efficient government administration will advocate limitations on the market status of private traders in favor of decentralized public bodies. "Some will face toward the past, clinging to values already achieved, and hoping to conserve them against the forces of destruction. Some will strain their eyes toward the future, trying to anticipate the course of events or guide it toward the better issue."[48]

Lord Keynes once expressed the hope that "economists could manage to get themselves thought of as humble, competent people, on a level with dentists."[49] But economists, unlike dentists, cannot escape the peculiar dilemma of all the social sciences to estimate what the human carriers of given institutions are groping to become, and making such estimates they cannot avoid including factors of valuation which reflect their interests, their hopes and fears, their moral aspirations for a better world. In the social universe, there are many possible positions of equilibrium where the marginal rates of substitution are equal, and which kind of equilibrium is likely to be approached with the least amount of friction is a matter of historical speculation, an act of faith. Unlike the natural sciences, social studies are engaged in analyzing a process of change which, at least in certain important respects, is not determinate at all but presents real options, and these options are of paramount significance to the minds of freedom-loving men. As stated by a leading sociologist: "At the risk of seeming to overplay the amount of option that actually exists, one may say that the social scientist works constantly in terms of the kind of universe the natural scientist would face if the latter held the power to postpone or to prevent its possible collapse as a place tolerating human life."[50]

Sincere disagreement among economists on the advantages or dangers of collective bargaining suggests the range of alternatives open to a free community in defining the various units of the market. To expect from economic theory final answers on the institutional dynamics of the social universe would misunderstand its very function of demonstrating the options to be decided by the nation's citizens. In his analysis of the market the economist cannot help sharing the fundamental tension of his community where every action is determined by a given matrix of past traditions and future goals with yet the only constant a pressure for continual change. In their judgment of how to guide this pressure towards the common good, "students of social science must fear popular approval; evil is with them when all men speak well of them."[51] And

[48] G. H. Sabine, "Social Studies and Objectivity," *University of California Publications in Philosophy*, October 1941, p. 132.

[49] J. M. Keynes, *Essays in Persuasion*, p. 373.

[50] R. S. Lynd, *Knowledge for What?*, p. 181. Recent developments in nuclear physics have brought about this very condition and enforced a growing interest in the social implications of modern science.

[51] Alfred Marshall, quoted in Simons, *op. cit.*, p. 1.

yet popular acceptance and approval—through action rather than through words—is the only final test of relevancy available to the scholar anxious to know whether he has been "right" in his interpretation of the social forces.

In this fearful dilemma the economist will best serve his community by making as clear as possible to himself and to others the thought processes behind his basic assumptions as to market determinants as well as their classification into constants and variables, autonomous or induced. In a social universe with no real constants and no truly independent variables, collective bargaining challenges economic theory to treat the institutional unit of the market, the "person," as an induced, dependent magnitude. While attempting to broaden their conceptual scheme, economists are bound, not to agree, but to follow that famous dictum of a great modern scholar: "Thought makes the whole dignity of man; therefore endeavor to think well, that is the only morality."[52]

[52] Pascal Blaise, *Pensées* (1662), Léon Brunschvicg (ed.), Paris: Hachette, 1904, sec. VI, p. 347.

REVIVAL OF FREE LABOR ORGANIZATIONS IN THE UNITED STATES OCCUPATION ZONE IN GERMANY—A PREVIEW

SAMUEL LISS*

Farm Security Administration
Washington, D. C.

I

In less than three months after the surrender, the United States forces headquarters in the European Theater took steps towards reviving free trade unions in Germany. On August 1, 1945, it issued instructions to all Military Government Detachments covering election of shop stewards and the formation of trade unions. A few days later (August 6), the Commanding General (Eisenhower), in a message to the German people in the United States Zone, stated:

> You will be permitted to form local unions and to engage in local political activities; and meetings for these purposes may be held subject to the approval of local Military Government.... The full freedom to form trade unions and to engage in democratic political activities will be extended rapidly in those areas in which you show a readiness for the healthy exercise of these privileges. Your own actions will determine the time for removing remaining restrictions.

Then on August 21, the public notices embracing the above directions were actually presented to the Germans.

Under these directives, the United States Military Government recognizes the right to organize as a civil right. It is a revival of a civil right established in Germany under the Weimar Constitution of 1919 and abrogated by Hitler in 1933. The abrogation of this civil right by the Nazis was followed by the complete destruction of free German trade unionism. Between May 2 and June 24, 1933, the Nazi Party through its so-called "Committee of Action for the Protection of German Labor" seized and destroyed the entire apparatus of the German trade unions and demoralized its 8,000,000 members.

The labor directives of the American Military Government permit the free and legal formation of trade unions and other labor organizations on a limited geographic and economic basis. The arrangements provided in the directives, however, "are temporary and are a first step in the restoration of free democratic unions" in Germany.

Thus, after more than a decade of ruthless suppression by the Nazi regime of the free labor movement of Germany, the political conditions for its revival, rehabilitation, and reconstruction were laid down by one of the conquering nations.

* Between May and October 1945, the author was attached to the Labor Section of the Military Government Detachment in Frankfurt am Main, Germany. Prior to his entrance into the Army, he was acting assistant director of the Labor Division, Farm Security Administration. He is at present in the Budget Division of this agency.

The green light given by the American occupation authorities for the revival of free labor organizations was received with serious eagerness and controlled enthusiasm by the socially conscious workers of Germany. That was evidenced in the early elections of shop stewards at the various plants in the Frankfurt area which this observer had the opportunity and duty of witnessing.

That the workers' reaction at these elections was characterized more by a serious eagerness than a flamboyant enthusiasm is explained partly by the fact that the whole process was not quite real to them. There was a feeling that some terrible hoax was being perpetrated upon them and that at any moment the Gestapo would burst in. Paradoxically the election booths, specially designed to maintain secrecy of the ballot, and the presence of the freely elected plant committee, which occupied seats behind a long improvised table in one corner of the room to distribute and receive the ballots and generally to supervise the election, contributed to the unreality of the scene. There was a realization among the elected members of the election committee, who expressed the thoughts of many of their constituents, that the return of free shop steward and trade union elections could not have been possible for a long time in Germany without the successful intervention of the Allies. The more politically conscious and labor conscious workers among the laboring classes consider the military conquest of Germany a blessing without which their liberation could not have been achieved. Allied conquest of Germany, they believe, has given them another opportunity to revive democratic institutions in their country.

The American policy on trade unionism for postwar Germany favored its revival from the very beginning. SHAEF's *Handbook for Military Government, Prior to Defeat or Surrender* contained the following statement:

> Workers will be given the right to form democratic trade unions and other forms of free economic association. In view of the years of Nazi indoctrination of workers and suppression of freedom of action and thought, it will be necessary to exercise close supervision over the development of trade unions and collective bargaining to assure that they will not be used as instruments for selection of Nazi officials as labor representatives and the continuance of Nazi organizations under new names.

Military Government labor officials in Frankfurt am Main had been cognizant from the very start of the occupation that interest existed among German workers for the revival of machinery of free labor representation. On April 12, a few weeks after the American liberation of Frankfurt, the local Military Government Detachment received a communication over the signatures of 16 persons representing themselves as former secretaries of as many former craft unions in that area. They requested, among other things, permission to make preparations for a reorganization of trade unions on a democratic basis. This communication was followed by a second a few days later informing Military Government labor officials that a number of former officials of former trade unions had assembled and had adopted an 11-point program to which a reply was requested as to their course of future action. On April 29, 1945, a former leader in the local trade union movement submitted a memorandum recommending the proposals

(1) that upon the reorganization of trade unions, the historical division into Social Democratic, Christian, and Hirsch-Duncker trade union factions be avoided; (2) that factory workers' councils abolished by the Nazis be reestablished as soon as possible.

Unquestionably, similar experiences of labor officials attached to Military Government Detachments in other areas of the American Zone could be cited as examples of early attempts and requests to form trade unions prior to general approval of USFET headquarters. To mention only a few: On or about March 15, 1945, when Aachen territory was still under American jurisdiction, about 70 former union members met there with local Military Government officials and formed the "Free German Trade Union League." This was the first free and independent union officially approved in Germany even before the end of hostilities. In July 1945 a free trade union was organized in Bad Homburg with an enrollment of about 200 local workers. Union books were issued and dues collection initiated. At about the same time, members of a self-constituted central labor committee met in Hanau and drafted a comprehensive plan for the establishment of labor unions of an industrial type in Stadt and Landkreis Hanau.

The relative caution with which American Military Government had proceeded in handling the important question of labor organization revival in its assigned territory was dictated in large part by the problem of method of approach. The underlying problem which faced American Military Government officials responsible for labor policy revolved around the question: Shall the reconstruction of German trade unions be accomplished from the top down or from the bottom up? The first method would have involved the physical restoration of the properties, assets, and operating machinery previously owned by the powerful German national labor unions and federations, and later confiscated and appropriated by Robert Ley's German Labor Front. It meant placing these long-established labor organizations back in business and in the hands of the old trade union leaders who survived the Nazi regime.

This method would have rested on certain political and economic assumptions. First, that the surviving labor leadership had learned the bitter lessons of Nazi dictatorship, were cured of factional diseases, cleansed from economic and political opportunism, and imbued thoroughly with a genuine spirit for, and deep convictions in, democratic institutions. Second, that 12 years of Nazi propaganda had had little or no effect on the German worker, that he was prepared to resume full-scale democratic participation in trade union activities in the interest of promoting economic democracy. Thirdly, that a minimum of change had taken place in the economy of the country, in the occupational composition and geographical stability of its manpower.

The second method seriously questioned the advisability and the practicability of a rapid revival of a German labor movement reconstructed on the old foundations. This method was based on the assumption that the pre-Hitler labor leadership could not be entirely exonerated from contributing to the conditions which facilitated the rise of the Nazis to power. Further, it was clear that the large majority of German workers were still contaminated with Nazism

and were not ready to contribute constructively in a labor movement as large and complex as were the former trade union organizations. There was a substantial risk involved in reviving the large trade unions and labor federations with a membership that was not yet free from the grip of Nazi idealogy and methods. Moreover, a number of Military Government officials felt that a revival of German trade unions on a national or regional basis would stifle the local initiative which workers had manifested in forming incipient labor groupings almost immediately after liberation. They held that such initiative and grassroots participation in the formation of labor organizations were vital in the reeducation of the German people to the ways of democracy and were an effective way of promoting urgently needed new leadership.

In the August 6 message to the German people, General Eisenhower committed the American Military Government to the second method. The German trade union movement was to be reconstructed from the bottom up, beginning with small local units.

With the official approval for the formation of labor organizations in the American Zone, the whole of Germany was placed on an equal footing with respect to this activity. Official sanction for the revival of free trade unionism in Germany was given earlier in the zones occupied by the Russians, British, and French. On June 11, 1945, Marshall Zhukov issued the following authorization:

> The working population of the Soviet Occupation Zone has the right to unite in free trade unions and organizations for the purpose of protecting the interests of all working people.... Trade unions, organizations and societies are to be granted the right of concluding collective agreements with employers as well as to form friendly societies and other institutions for mutual assistance.

On July 25, 1945, a new labor union known as the "Free German Trade Union" was approved by the British Military Government. Similarly, on or about the same date, the reorganization of trade unions in the French-occupied section of Württemberg was authorized by the French Military Government.

The American "Instructions to Military Government Detachments. . ." are divided into two parts: Part A concerns the election of stewards; Part B relates to the formation of trade unions. The two measures are mutually exclusive in structure but not in function in that the election of shop stewards does not preclude workers from joining trade unions. The latter, in fact, can be organized simultaneously with the election of stewards. In pre-Hitler Germany those two labor bodies, the works councils or system of shop stewards and the trade unions, were functionally related. In general, the works councils were the "long arm" of the trade unions in the factory. In form they were independent of the trade unions, but they constantly had recourse to the trade unions for assistance in the fulfillment of their duties. The members of the works councils were invariably trained and educated in the trade union schools and supervised by the trade unions.

II

The election of shop stewards, following approval of the Military Government, is to be held by secret ballot. The elected stewards may represent the

workers and employees in the plant as a whole or by crafts, trades, sections, or departments within a plant or establishment. The choice of representation unit is left to the workers and employees of the plant or establishment. For an election of stewards to be authorized by Military Government, a minimum of one-fourth of the number of persons in any one of the units of representation must submit, through a committee of petitioners, a petition requesting an election. This petition must also specify the unit or units of representation to be adopted and the number of stewards to be elected.

It is not unlikely that the workers in following the election procedures fixed in these directives will be governed by past experiences and previous practices under the Works Councils Act of 1920, provided they are not in conflict with Military Government directives. That act provided that all plants employing at least 20 employees were to elect works councils, while those employing between 5 and 19 persons were to elect plant chairmen (*Betriebsobmänner*). The works councils in private industry were composed of councils of manual workers (*Arbeiterräte*) and councils for salaried employees (*Angestellteräte*). But the combined council represented all the wage workers and salaried employees in a plant, factory, or establishment. The elections were conducted on a proportional basis. Thus in specifying the number of stewards to be elected in the current elections, the proportional basis of their election will probably also be indicated. The term of office of an elected steward is fixed in the directives and is for a period of three months.

Thus the system of shop stewards will assume the aspects and functions of former works councils with limited authority. In practically all cases, it may be assumed, the shop stewards will be elected to represent all the employees in the plant as a whole, but the previous conventional division between wage manual workers and salaried white-collar employees in private industry and between workers, employees, and officials in public agencies will probably be retained.

Following the election, the committee of petitioners in charge of conducting the election are required to submit to Military Government and to the local German labor office a written certification to the effect that the election was conducted fairly and honestly in accordance with the specified rules, and to indicate the names and addresses of the elected stewards. The elected stewards are required to report to Military Government to execute questionnaires (*Fragebogens*) which will be reexamined for the purpose of certifying whether they have met the qualifications established under the directives.

For the purpose of steward elections, two categories of eligible voters are defined: (1) all persons at present employed in the unit designed for representation; (2) persons formerly employed in the plant, shop, office, or establishment who may have been discharged or laid off because of their anti-Nazi activities and who now signify a desire for reemployment. The eligible voters in the second category, if they appear for reinstatement, would not only exercise a justified influence in the election but would act as a further lever in the denazification of the management. Any dispute concerning the eligibility of voters or the conduct of the election will be brought, through the office of the *Burgermeister* or *Landrat*, to

the local German labor office (*Arbeitsamt*) for decision, including the running of a new election if necessary.

The qualifications which candidates for the position of stewards must possess are also fixed in the directives, as follows: (1) must be an employee in the unit which he or she will represent; (2) must never have been a member of the Nazi party; (3) must never have been an official of the German Labor Front; (4) must never have been and must not now be a Nazi sympathizer or militarist.

The extent to which it is designed to throw the burden of responsibility on the shoulders of the workers for selecting and electing politically unblemished candidates for the position of shop stewards is illustrated by the following provisions in the directives: In the event an elected steward is found to have been a former official of the German Labor Front or to have been a member of the Nazi Party or who is subject to removal and exclusion from office in accordance with previous directives, the Military Government will then declare the election void and publicize the reason for such action. Another election, however, may be permitted. Moreover, any steward undertaking action tending to be hostile to the objectives of Military Government is subject to interrogation, warning, removal from office, and trial before a Military Government court.

The directives recite the obligation of the employer to negotiate adjustments of grievances in good faith with the duly elected stewards. The employer is prohibited "from discharging an elected steward for any reason connected with his duties as steward, or from otherwise interfering with the right of the employees to be represented by stewards of their choosing." In fact, it is expressly provided that "stewards will be permitted to spend a reasonable amount of working time to perform their duties as stewards without loss of payment." Discrimination against any employee for supporting a particular candidate or seeking to influence the votes of employees are likewise prohibitions leveled against the employer. This follows provisions in the Weimar Constitution prohibiting the discharge of workers for trade union membership or activity, but does not go as far as the Works Councils Act of 1920. That act provided that the consent of the works council had to be obtained before an employee representative could be discharged for any reason.

The purpose of the shop steward system is to establish an immediate and comparatively rudimentary type of grievance machinery to function on behalf of workers and employees in negotiating with the employer. However, the items subject to collective bargaining or negotiation are circumscribed. They are: (1) any question affecting working conditions, *except wages and hours;* (2) elimination of Nazis and militarists from the management and from among the workers and employees; (3) reemployment of victims of Nazi persecution.

While exclusion of wages and hours as appropriate items in collective bargaining removes the basic props from under the functional relationships between labor and management in a free economy, it is generally recognized that at present and for some time to come the production and exchange mechanisms of the Germans are to be subject to strict control and supervision. Under such a controlled economy, it is apparent that the role of wages and hours cannot be given

the independent play customary in a free economy under normal conditions. By the same token, it is to be expected that profit margins will also be circumscribed.

But there is even greater immediate justification in stabilizing wages and hours at present—namely, to prevent the aggravation of forces which are now poised to spring into action leading to a runaway inflation. The German production plant has been largely destroyed as a result of the war, and there are acute scarcities of all categories of goods and services—with no immediate prospects of lifting the levels of production. At the same time, there are substantial pools of savings accumulated during the war years when full employment and earnings prevailed side by side with comparative shortages of consumption goods. These savings, at least those in the form of bank deposits, have not been confiscated. Although they were frozen in the early months of occupation, they are now subject to periodic withdrawal in limited amounts. Of course, not all savings are in the form of bank deposits—and those held on the person constitute a source of purchasing power which defies control.

Until further notice, therefore, wages have been frozen at the levels which were in force in 1938, the year when the last wage regulations were promulgated in Germany. The number of weekly hours of work has been fixed at 48. The 48-hour week cannot be considered uneconomic or arduous, particularly in a period of reconstruction. Moreover, even the Weimar Constitution established a basic 8-hour day and 48-hour week, with flexibility provided through overtime rates and emergency exceptions. In fact, a 10-hour day had become commonplace in Germany by the outbreak of the war.

It is not to be overlooked, moreover, that the exclusion of wages and hours from collective bargaining still leaves a number of important items affecting working conditions subject to negotiation between stewards and employers, such as health and safety factors, hygiene problems, time and method of wage-payment, emergency extension and contraction of hours, working conditions for women and juveniles, and rules for apprenticeship.

Finally, though the present system of shop stewards does not possess the full economic functions and powers that the former works councils had, it gains a political authority which is nothing short of revolutionary in the field of contemporary labor relations. By granting the stewards the power to determine the political reliability of the employer, management, and workers, Military Government has in one stroke created antifascist councils in every plant, shop, factory, and office in the American Zone of Occupation. It will undoubtedly prove to be the longest step yet taken in the denazification of the German economy. For in the last analysis, only the German people themselves, given a good start and continuous encouragement by our own Military Government officials, can do a thorough job in reaching and sweeping out the Nazi elements and their antisocial idealogy which still lie hidden in the dark recesses of defeated Germany. And what is more difficult yet more important, only the ever growing influence of the German antifascists can prevent the Nazis and the militarists from ever getting another lease on German life.

III

The five underlying principles contained in the directives may be summarized as follows: (1) workers are permitted to organize into unions along either craft or industrial lines; (2) the existence of dual and competing unions within the same craft, industry, or establishment is permitted and recognized; (3) the principle of voluntarism is advanced—compulsory membership will not be permitted and democratic principles of free association are to govern the initiation and establishment of trade unions; (4) the geographic jurisdiction of any trade union or council of trade unions is to be limited to a *Kreis*, roughly equivalent to an American county; (5) the functional jurisdiction is circumscribed insofar as wages and hours are not permissible subjects for collective bargaining between the union and the management at this time.

In addition, the directives specify the following conditions as prerequisites for the establishment and continuation of trade unions: (1) sponsors of unions must never have been Nazi party members, regardless of whether they joined prior to or after May 1, 1937; neither are sponsors to be persons whose exclusion from government office or responsible position in quasi-public or private industry is mandatory; (2) sponsors of unions are required to execute questionnaires and be carefully screened by Military Government before being approved; (3) sponsors must be workers or former workers in the trade or industry groups to be represented by the union; (4) no former *official* of the German Labor Front, Nazi Party *member or sympathizer*, or militarist may hold any office or position of trust in the trade union; all officers are to execute questionnaires and be screened by Military Government before approval; (5) the trade union must provide in its constitution, ratified by its membership, for a democratic election of officers at regularly stated intervals, and must at all times conduct itself according to recognized principles of democracy; (6) list of names and addresses of all officers elected must be filed with Military Government, which must be notified immediately of any changes; (7) records of membership, proceedings, and finances are to be kept and made available for inspection by Military Government; (8) the trade union is prohibited from engaging in activities hostile to the objectives of Military Government, (9) violations of foregoing provisions will result in the removal of the officer or member responsible or, if the offense warrants, in the disbanding of the organization and such other punishments as a court may impose.[1]

In applying for permission to form a trade union, sponsors must secure and fill out a Military Government form entitled "Application for Permission to Form a Trade Union." The applicants are asked to give the name of the proposed union, the geographic area of operation, classes of employees eligible to join, purposes and objectives of organization, attached signatures of workers desiring to join (no specific number of signatures is required, but enough signers to indicate there is a real desire for organization), and names and addresses of five sponsors. The

[1] In the original draft of the directives, trade unions were prohibited from engaging in political activities. This restriction, however, was removed when the directives were made public.

application is submitted to the appropriate local Military Government Detachment for review and recommendation before it is transmitted to higher Military Government echelons for final approval. Trade unions which had been authorized before these directives went into effect are permitted to continue to function, subject to previous investigation and determination that there is no evidence of Nazi, militarist, or other hostile influence against the occupying authorities.

An examination of the controlling principles under which the formation of trade unions in the United States Zone of Occupation is being accomplished reflects both a restrictive and a liberal approach on the part of the America authorities. It is restrictive in geographic scope and economic jurisdiction and liberal in the traditional organizational sense in allowing for a competitive bidding for workers in the labor movement, both on the craft and industrial basis.

To what extent the German workers and employees will be disposed to accept the permission to form competing unions within the same crafts, industries, and establishments cannot be predicted with certainty. There would seem to be two prevailing forces exerting their influence in conditioning the future shape of the trade union structure in Germany. There will be the tendency to emancipate themselves from the monopolistic and totalitarian influence and control of the former German Labor Front—the Nazi ersatz for labor organizations. There will be also the unpleasant memories of competing labor organizations, each with its separate political orientation, which existed prior to Hitler and which in no small measure contributed to his rise and assumption of power through their inability to unite against a common mortal danger.

The first, the centrifugal force, will push away from the pseudo-unity of Nazi labor organizations; the second, the centripetal force, will pull toward a unity in the labor movement. To this observer, it would seem that the centripetal forces of unity will prove the more powerful—at least in the early stages of trade union revival and reconstruction. The former division in the trade union movement (the *Allegemeiner Deutscher Gewerkschaftsbund* or the so-called "free unions," the *Deutscher Gewerkschaftsbund* or the Christian Nationalists, the Hirsch-Duncker unions, the Syndicalists, and other independent unions) will probably become a war casualty. The large majority of the present trade union leaders, regardless of previous affiliations, are convinced of the necessity for having one single workers' labor organization throughout Germany. It is also likely that the former organizational division between wage manual workers, salaried white-collar employees and public or government officials will be abandoned in the interest of unity.

With regard to the admonition in the directives stipulating that "compulsory membership will not be permitted," it should be noted that the closed shop did not exist in Germany even prior to Hitler. In fact, the unions did not aspire to a closed shop because it was unnecessary. The vast majority of employers accepted unions as a recognized institution. Furthermore, the geographic limitation respecting the jurisdiction of any trade union or council of trade unions to a single *Kreis* can be expected to be only a temporary arrangement. The flexibility of this provision is manifest from a qualifying statement in the directives to the

effect that this limitation will prevail "until such time as it is clear that the union has a substantial, bona fide, voluntary membership."

The attitude and responsibility of Military Government in the current revival of German labor organizations are expressed in the directives. It is to take "no steps designed to stimulate or encourage the election of stewards" or union officials. Its role, it is stated, "will be that of a disinterested supervisor concerned only with the attainment of its objectives." "The maximum responsibility for the conduct of fair elections will be placed in the workers themselves," and "Military Government will be on the alert to detect any evidence of Nazi, militarist or other hostile influence on trade unions which have been or may be authorized."

Thus, the actual job of reviving and reconstructing the German labor movement is placed squarely on the shoulders of the German workers themselves. That is as it should be. The task of guiding its initiation and development, however, is definitely assumed by the Military Government authorities.

It is generally agreed upon and accepted that Military Government, or any civilian administration of occupation which may replace it, must provide in Germany a transition from Nazism to democracy if the larger aims of the war and of the occupation are to be achieved. The Potsdam Declaration of August 1945 is clear on this objective:

> It is not the intention of the Allies to destroy or enslave the German people. It is the intention of the Allies that the German people be given the opportunity to prepare for the eventual reconstruction of their life on a democratic and peaceful basis. If their own efforts are steadily directed to this end, it will be possible for them in due course to take their place among the free and peaceful peoples of the world.

There is no more effective way to begin that transition and to give them "the opportunity to prepare for the eventual reconstruction of their life on a democratic and peaceful basis" than through the medium of a free German labor movement. The interdependent relationship between democracy as a social organization and procedure on the one hand and the labor movement on the other is an established fact that needs no further exploration. It is now a tragic but historic fact that both Mussolini and Hitler found it necessary to destroy the labor movement first before embarking on the task of undermining all other democratic institutions. Logically, therefore, the revival and reconstruction of a free and independent labor movement in Germany is the best guarantee for the liquidation of the remaining remnants of Nazism.

The ground has now been prepared for its rebirth. Within limits of military security, restrictions upon freedom of speech, assembly, and organization have been removed. It's now up to the German workers to find their own way on the long and difficult road to rehabilitation along truly democratic lines—and with their own leadership.

LOCATION OF POTENTIAL LABOR RESERVES FROM PUBLISHED DATA

ARTHUR M. WHITEHILL, JR.

University of Virginia

I

The need has been expressed, particularly by relatively small business organizations, for a simple but reasonably accurate method of spotting potential labor supplies from readily available data. Wage bills are occupying an increasingly important position in the semivariable cost structures of most industries. For this reason, prerequisites of industrial location involve not only the location of the required number of workers but also the selection of workers possessing the race, sex, and training characteristics desired by the organization in question. As the decentralization of industry progresses, the demand for, and the significance of, this type of information may be expected to increase. Relatively few persons in the business world are familiar with methods of interpreting the voluminous statistics available for help in dealing with these and other related problems, especially methods involving little or no cost.

In some instances, consideration of the physical location factors, such as power, transportation, or nearness to markets and raw materials may be of equal or greater importance than the problems of labor supply in selecting a plant site. It is true that many plants are, in effect, resource-bound. How potent a factor the existence of workers, in certain numbers or possessing certain characteristics, will be in locating a plant bears a direct relationship to the proportion which labor costs bear to total costs. In many instances the physical factors desired by an industry will be equally available in a number of different places. If such is the case, the problem becomes one of choosing the best of the alternative sites on the basis of the availability of human resources. No amount of research will adequately take the place of an actual inspection of the area or interviews with prospective employees when a final decision is to be made as to location. State and local chambers of commerce, private research organizations, and university research bureaus, however, can often furnish much preliminary information and advice.

Many businessmen would like to be able to make a preliminary investigation of the relative labor possibilities of the various counties in several states from analyses of data which are readily available at little or no expense. It is the purpose of this article to outline a simple technique which will satisfy this requirement by utilizing the basic statistics which are available in documents published by the United States Bureau of the Census and in annual reports of the labor departments in practically every state.[1]

[1] For a directory of state labor offices see *Labor Offices in the United States and in Canada*, Bulletin No. 74, U. S. Department of Labor, Division of Labor Standards, July 1, 1945.

II

Let us assume that a person desiring to start a small manufacturing establishment has decided that geographical factors, climatic characteristics, and other considerations indicate that a particular region, composed of several states, would best satisfy his requirements. Aware in a general way that his labor supply will be one of the most important considerations in choosing a site, he would want to determine where in this region workers of the race and sex most suitable for his anticipated manufacturing operations might be found.

Race and sex characteristics of workers in a particular industry are functions not only of the technology of the industry in question but also of geographical location and social customs. The fact that nonwhite female workers usually engage in a restricted list of occupations in various sections of the country is undoubtedly influenced as much by the nature of the available labor supply as by the technical requirements of the particular operation. For this reason, selection of at least the regional location for a prospective industry should precede the examination of race and sex characteristics of workers in that industry.

State departments of labor are usually responsible for the collection and publication of such labor statistics concerning employee characteristics as are available on an annual basis. For example, the Virginia State Department of Labor and Industry includes in its annual reports tables which set forth the sex and race of workers in the various manufacturing industries in that state.[2] The average number of wage earners for the year covered by each report of this department is tabulated by industry group and by industries within each group.

Sex and race characteristics of wage earners in any one industry usually show considerable stability over a period of years. The employee characteristics for any one industry, however, when compared with any other may show wide differences. An example of such interindustry variations in the composition of labor force is seen in the textile industry group where white males accounted for only about 10 per cent of all workers in the clothing industry in Virginia during 1943, while a similar analysis of workers in plants manufacturing woolen and worsted goods showed white males accounting for approximately 70 per cent of the labor force. Another example of the wide variations which exist from industry to industry is seen in the fact that although white female workers make up about 85 per cent of employees making clothing, white females account for only 17 per cent of all persons employed by mattress manufacturers. These variations in race and sex composition of the workers from one type of operation to another reflect the prevailing employment practices. Analysis of such factors is usually helpful in selecting plant sites for any industry.

III

The above method of analysis enables the prospective manufacturer to obtain a picture of the sex and race of workers utilized by plants already engaged in

[2] See, for example, *Labor and Industry in Virginia*, Forty-sixth and Forty-seventh Annual Reports (Richmond, Va., Department of Labor and Industry, March 31, 1945), Table 6, pp. 56–57.

similar operations in the region he has chosen. After investigation of the race and sex of workers employed by the manufacturing operation in question, the major problem, then, as far as labor supply is concerned, will be to single out areas in which substantial reserves of the type of workers required are available.

Census data may be conveniently utilized to study the characteristics of the population in the various counties of whatever state may be selected for analysis.[3] Probably the most significant relationship, as far as locating potential labor reserves is concerned, is the percentage of population by color and sex 14 years old and over in the labor force by counties.[4] Those counties having a relatively small percentage of their population 14 years old and over in the labor force may reasonably be expected to have pools of potential workers of the sex and race indicated. In order to locate these areas it is convenient to map the data for each county as illustrated by the circles shown in Figure

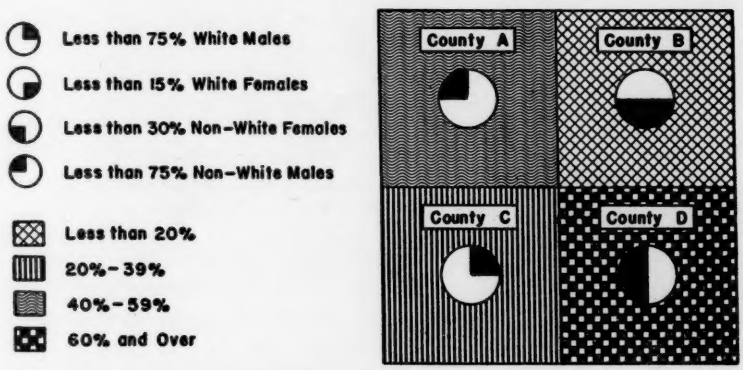

FIG. 1. PER CENT OF POPULATION, BY COLOR AND SEX, 14 YEARS AND OVER IN LABOR FORCE, AND WORKERS IN SPECIFIED INDUSTRIES AS A PER CENT OF TOTAL EMPLOYMENT IN ALL MANUFACTURING

1. The map legend should set standards which are somewhat lower than the state average of persons 14 years old and over in the labor force for each sex and race class in order to set forth clearly those counties in which potential reserves are likely to be found.[5] The counties with circles either partially or completely filled, with certain exceptions noted below, would be likely to have a better than average potential labor supply of the color and sex class indicated. In other words it is reasonable to expect that in those counties in which the

[3] *Population*, Second Series, Virginia, Sixteenth Census of the United States, 1940, Table 23, pp. 73–88.

[4] Persons in the labor force are defined for census purposes to include all those 14 years old and over who are either at work, have a job but are temporarily absent from work, are on public emergency work, or are seeking work.

[5] For example, in 1940 the average percentage of persons 14 years old and over in Virginia's labor force was 82 per cent for white males, 21 per cent for white females, 82 per cent for nonwhite males, and 36 per cent for nonwhite females. The legend standards used in Figure 1 have been set at 6 per cent below the state averages purely for illustrative purposes.

percentage of population in the labor force is somewhat less than average for the state as a whole, persons may be drawn into the labor force up to a point roughly approximating the state average.

It is necessary to take into account the size and characteristics of institutional populations, if such exist, in appraising a county's potential labor force.[6] Since inmates of institutions are included as a part of a county's population, the statistics by age, color, and sex include persons who in reality are not available for employment.

Of particular importance to any manufacturer employing primarily white females would be the lower right-hand quadrant of the circles drawn on Figure 1. If that quarter is blacked in, it means that in these counties the percentage of white females 14 years old and over already in the labor force is less than 15 per cent of the total white female population over 14 years of age. Since the state average, as explained above, would be somewhat higher, it is reasonable to expect that in these counties the prospect is favorable for attracting additional white female workers into the labor force.

IV

The technique outlined thus far may be used to indicate for a given industry (1) the sex and race characteristics of workers already employed by plants in the states chosen for study, and (2) the location of counties in which workers possessing these characteristics are most likely to be available.

In addition to this information, the industrial settler may wish to compare different areas in order to locate those in which similar operations are, or are not, already of considerable importance. A simple spot map could be constructed from census reports which list by industry groups the number of establishments by counties in each state.[7] These data, however, cannot be used for the location of plants within any industry group. In many states a spot map may be constructed to show the location of each plant within a given industry group from data available from either the state chamber of commerce or the state labor department. Simple spot location maps, however, have a serious limitation when used as tools of analysis in plant location studies. Too often the mere nonexistence of a plant engaged in operations similar to those contemplated in a given area carries the erroneous connotation that here is a location in which settlement would be advantageous. Such a condition, on the contrary, may indicate more accurately that here is a location in which resources, either human or material, have already been proved to be inadequate to support a new industrial operation. The employment of a mapping technique involving the use of circles such as those shown in Figure 1 provides a useful check in this respect by showing counties which have not already drawn a relatively large proportion of their population 14 years old and over into the labor force.

[6] *Population*, Special Report on Institutional Population 14 Years Old and Over, Sixteenth Census of the United States, 1940.

[7] *Manufactures*, State Series, Sixteenth Census of the United States, 1940.

Of far greater importance than mere physical location in finding areas with potential labor supplies is the relative role of workers engaged in the type of operation under investigation in the employment patterns of various counties in a state. The percentage of the total manufacturing employment in any county accounted for by such specified workers is a useful measure to employ as an approach to this problem. This information can be mapped with the labor force data as illustrated by the hatching in Figure 1. Census data are readily available which provide the basis for construction of maps employing techniques used in the construction of Figure 1.[8] These would show at a glance the relative percentage of workers engaged in a specified industry in each county of any state selected.

If the future manufacturer would prefer to settle in a county in which similar operations do not already play an important part, construction of the dual purpose map referred to should be helpful. Obviously competition would be least in those counties shown by the hatching as having workers in the specified operation accounting for less than 20 per cent of the total manufacturing employment.

If, on the other hand, the future manufacturer would prefer to settle in a county in which native workers had already become familiar with the type of employment in question, the procedure would, of course, be quite different. In this case, counties having a relatively high percentage of manufacturing employment already in the industry being surveyed would be selected. The offer of higher wages, better working conditions, and other such advantages would then have to be relied upon to lure workers away from existing plants. The use of the graphic presentation outlined above would, of course, be equally effective no matter which of these two purposes prevailed in any given case.

V

Each of the separate techniques outlined thus far may now be briefly summarized and combined to form an integrated procedure for the preliminary appraisal of potential labor reserves from published data.

The manufacturer considering plant location in a particular state would find it desirable to determine the sex and race of workers performing the operations in which he is interested. From such data a bar chart might be constructed to give him a "key" to the type of labor force it will be necessary to recruit.

With this information, the next step is to locate counties in which potential workers of the sex and race desired may be found. Utilizing census data, it is possible to spot those counties which have not already drawn into their labor forces as large a percentage of its eligible population as have others. A map may then be drawn with a circle divided into quadrants (as in Figure 1) for each county to show the per cent of population by color and sex 14 years old and over in the labor force.

Aware of the sex and race of workers required and of where potential sup-

[8] *Population*, Second Series, Virginia, Sixteenth Census of the United States, 1940, Table 23, pp. 73-88.

plies of such workers may be found, some appraisal of the competitive situation to be encountered would then be in order. Utilizing data available from state chambers of commerce or state labor departments, a simple spot map may be drawn to indicate the geographical location of plants already operating in the same or related fields. As a more significant measure of the role played by a given type of operation in the economy of an area, the labor force map referred to above may be hatched to show the percentage of total employment in manufacturing accounted for by plants in a given field.

By the analysis of selected data the prospective manufacturer could roughly determine (1) the sex and color characteristics of the workers employed by existing plants engaged in the industry which he desires to enter, (2) counties which are using relatively small percentages of the workers having the sex and color characteristics desired, (3) the geographical location of plants already engaged in a particular type of operations, and (4) counties in which a given industry already plays a dominant role in the employment of all workers employed in manufacturing. The sources of information cited are readily accessible and the data may be prepared at modest expense. When an analysis has been completed along these lines, the businessman is in a position to direct more intensive and thorough investigation to those areas which are most likely to meet his varied requirements.

THE DETERMINATION OF POSTWAR EXCHANGE RATES

RAYMOND F. MIKESELL

University of Virginia

On September 12, 1946, the managing director of the International Monetary Fund requested each of the Fund's 39 members to advise the Fund of the par value of its currency.[1] Members of the Fund are required to communicate the par values of their currencies in terms of gold or the United States dollar based on rates prevailing on October 27, 1945. The par values so communicated will be certified as the official par values of the members unless either the member notifies the Fund that it regards the par value as unsatisfactory or the Fund notifies the member that "in its opinion the par value cannot be maintained without causing recourse to the Fund on the part of that member or others on a scale prejudicial to the Fund and to members."[2] Except in the cases of France and Greece, whose currencies have been substantially devalued since October 27, 1945, it is expected that nearly all members will want to retain par values consistent with the official rates existing on October 27, 1945. However, in spite of the radical economic changes which occurred during the war, many of the rates prevailing on that date are substantially the same as those existing in 1939. For example, wholesale prices in Egypt advanced more than 230 per cent from August 1939 to the end of 1945; wholesale prices in Iraq advanced 417 per cent; in India wholesale prices rose more than 200 per cent; and in Cuba the cost of living rose 108 per cent. Yet in none of these countries has there been any significant change in the exchange rate since 1939.

The usual method of determining the proper exchange rate for a country after a period of economic disturbance is to alter the exchange rate in the same proportion by which its price level has changed relative to prices in other countries. This is the familiar purchasing power parity method of exchange rate adjustment which was popularized by Gustav Cassel in the early 1920's.[3] The purchasing power parity formula seeks to establish a rate which will restore the same ratios between the price levels of different countries as existed at an earlier period considered to be normal. According to the purchasing power parity criterion most of the rates which will be communicated to the Fund

[1] Article XX, Section 4 (a) of the Articles of Agreement of the International Monetary Fund states as follows: "When the Fund is of the opinion that it will shortly be in a position to begin exchange transactions, it shall so notify the members and shall request each member to communicate within thirty days the par value of its currency based on the rates of exchange prevailing on the sixtieth day before the entry into force of this Agreement. No member whose metropolitan territory has been occupied by the enemy shall be required to make such a communication while that territory is a theater of major hostilities or for such period thereafter as the Fund may determine."

[2] *Articles of Agreement*, Article XX, Section 4 (b).

[3] See Gustav Cassel, *Money and Foreign Exchange After 1914*, p. 157.

are substantially overvalued. Thus, for example, if we compare the rise in Egypt's wholesale prices with the rise in United States wholesale prices from August 1939 to September 1946, we find the calculated purchasing power parity rate to be approximately $2.45 per Egyptian pound as compared with the existing rate of $4.13.[4]

The questions to be considered in this article are: (1) Is it in the interest of the individual countries concerned to maintain rates which differ markedly from the calculated purchasing power parities? (2) Is it in the interest of the Fund to accept or reject these rates? And (3) what is a practical criterion for the Fund and the country concerned to adopt? Before attempting to answer these questions, however, it will be necessary to examine the purchasing power parity approach in relation to the objectives of an international exchange rate policy consistent with the multilateral trading system which the Fund is seeking to restore.

I

Following World War I the purchasing power parity theory was more capable of practical application than it is today. Although wartime price and rationing controls were employed during World War I, they left considerable scope for independent market forces in the determination of prices. The economic controls employed during World War II were far more comprehensive. Prices and costs of nearly all commodities and services have been fixed by governmental decree and in some cases costs have been lowered with the aid of subsidies. The demand for both producers' and consumers' goods has been limited and directed by priorities, allocation, and rationing. Moreover, these controls have not been applied uniformly in all countries. In countries where there are extreme shortages and where great disruption of economic life has taken place, economic controls have been only partially successful, and a substantial portion of all trading has been done in black markets, often at prices several times the official prices for the same commodities. Under such circumstances prices tend to become highly artificial and their ratios have little significance from the standpoint of determining exchange rates.

Even if it were possible to construct a reliable measure of relative price changes in different countries, the purchasing power parity approach is open to a more fundamental objection. The purchasing power parity approach does not necessarily provide a basis for the determination of exchange rates which is consistent with equilibrium in the balance of payments. The purchasing power parity rate merely reestablishes the same ratio between internal and external prices or costs (depending on what indexes are used in the calculation) as existed in the base period. Assuming that the base period was one in which there was equi-

[4] An unpublished study prepared by the research staff of a federal agency shows that for most members of the Fund the calculated purchasing power parity rates on the basis of both wholesale prices and the cost of living in May 1946 were substantially lower than the rates existing on October 27, 1945. Notable exceptions are Canada, the Union of South Africa, and Uruguay.

librium in the balance of payments of the country whose rate is under consideration, there is little justification for assuming that a reestablishment of the old price or cost ratios will restore equilibrium in that country's balance of payments. If in the intervening period since the base year the country has lost an important export, or its income from foreign investments and services has been drastically cut, or it has suffered a relative decrease in productivity in a major export industry, that country may be able to restore equilibrium only by means of a reduction in the base period ratio of internal to external prices. An exchange rate which is based on the restoration of the relative levels of prices or costs as they existed in an earlier period during which equilibrium has been attained can only be an equilibrium rate in the unlikely event that no change has occurred in the real conditions of trade in the interim. It is difficult to imagine a situation in which there have occurred sharp changes in relative price levels in different countries without there having occurred during the same period changes in the pattern of world demand and supply, changes in the levels of real income and in industrial and agricultural productivity, and other economic adjustments which have a bearing upon balances of payments. Unless changes in these real factors are taken into account, a readjustment of exchange rates based on purchasing power parities can have little validity.

In a recent article Dr. Morris E. Garnsey discusses a variant of the purchasing power parity theory in which he takes into account changes in the relationship between retail prices, wages, and living costs, which are relatively insensitive to changes in external prices, and the internal prices of raw materials, which are relatively sensitive to changes in external prices.[5] According to Garnsey, the appropriate exchange rate for a country should be determined by measuring the degree of (external) disparity between the cost-of-living indexes at home and abroad and adjusting the degree of external disparity by means of a measure of (internal) disparity between the index of the cost of living (or retail prices or wages) and the index of domestic industrial raw material prices. If the degrees of internal and external disparity are approximately the same, the new exchange rate should be established at a point which eliminates the external disparity. If, on the other hand, the degree of internal disparity is less than the external disparity, a somewhat smaller devaluation would be called for. Dr. Garnsey shows that in the case of Belgium the degrees of external and internal disparity were approximately the same at the time of the devaluation of the Belgian franc in 1928 and again in 1935. He does not say, however, what the proper procedure would be if relatively little internal disparity existed between living costs and industrial raw material prices, as is likely to be the case for a country such as the United States, in which external prices have a relatively small effect upon wholesale prices of raw materials.

Dr. Garnsey's variation of the purchasing power parity method does not get around the basic fact that the elimination of both internal and external

[5] "Post-war Exchange-Rate Parities," *Quarterly Journal of Economics*, Nov. 1945, pp. 113–135.

price disparities will not restore equilibrium in the balance of payments if changes in real conditions of production and trade have taken place. Moreover, internal price disparities between retail prices and the prices of domestically produced raw materials will be largely a problem of internal adjustment. Only in the case of countries which import the bulk of their raw materials will the correction of internal disparity be largely a matter to be handled by an adjustment of the exchange rate. Even here such an adjustment should not be made if it would result in a favorable balance of trade for the devaluing country.

According to Dr. Garnsey if the internal disparity is less than the external disparity, the amount of the exchange depreciation should be less than would be indicated by the amount of the external disparity alone. But where the internal disparity is due to internal causes, the amount of the devaluation should not be larger than it would otherwise need to be. To correct such an internal disparity by a devaluation of the exchange rate must be classed as a "beggar-my-neighbor" practice.

II

What should be the objectives of an international exchange rate policy? The appropriate exchange rate policy for countries operating in a world system of multilateral trade and payments will obviously not be the same as that appropriate for countries operating under a system of rigidly controlled trade. Moreover, in order for a country to be successful in realizing an exchange policy consistent with a world of multilateral trade and free exchange dealings, the major trading countries of the world will need to adopt a common exchange policy.

For a country whose balance of payments is rigidly controlled an exchange rate which will secure a balance in its current international account has little meaning. If imports are controlled by means of quotas or exchange controls, the exchange rate simply determines how much in local currency that country's residents will be required to pay for the imports they are permitted to by. If export prices are not controlled, the rate will be a significant factor in determining export prices in terms of foreign currencies. In such cases the exchange rate might be determined largely with reference to the elasticity of demand for that country's exports. If multiple rates are employed, the rate will vary from commodity to commodity depending upon the individual elasticities of demand. In the determination of the rate or rates the objective is likely to be the maximization of total foreign currency receipts within the limits of the maximum volume of commodities which the authorities considered it to be prudent to export. Where export demand is inelastic the rate will tend to be high; in cases where the demand is elastic there will be a tendency to fix relatively lower rates, although not so low as to reduce the terms of trade below what the authorities considered to be in the national interest.

In a world in which all countries maintain complete control over imports, exporters would be operating for the most part in an oligoponistic market, each country striving to set its rate at a level which would maximize its terms of

trade. In a world in which individual export prices as well as the level of imports are controlled, exchange rates would have no significance other than for accounting purposes.

The determination of exchange rates on the assumption that exchange and price controls will be the primary means by which countries will achieve a balance in their international accounts is directly contrary to the interests of the Fund and its trade counterpart, the proposed International Trade Organization. The purpose of the Fund and the ITO is to promote maximum freedom in international business dealings.[6] This means a multilateral world in which, except for special circumstances, each country's current payments and receipts on international account are determined by the decisions of individuals engaged in foreign dealings.[7] In the determination of postwar exchange rates, therefore, the Fund should assume the absence of exchange restrictions, import licensing, and quota controls. Tariffs might be assumed to be at the same level as they were before the war. This does not mean that members of the Fund will be able to remove their existing exchange and trade restrictions immediately. In fact many countries would be unable to achieve a balance in their current international account at any rate which might be adopted during the transition period. It does mean that in the determination of initial par values the Fund should look ahead to the posttransition period when it is hoped international dealings in most countries will be reasonably free.

In a world of free and multilateral trade the objective of a common exchange rate policy should be the establishment of a pattern of exchange rates which will assure international equilibrium for all countries.[8] It is true, of course, that real conditions of trade which affect international equilibrium change from year to year. Frequent changes in exchange rates are, however, disturbing to trade and should, therefore, be avoided. Exchange rates should probably not be altered in response to short-run cyclical disturbances or to accidental disturbances such as crop failures or disasters. Temporary imbalances should be handled by each country's using its monetary reserves supplemented by an international pool of reserves such as is provided for in the International Monetary Fund. A persistent disequilibrium in a country's international accounts should be a signal for a careful review of its exchange rate. Exchange rates should not be altered, however, without a consideration of the effects of the change on the balance of payments of other countries.

When the above criterion for the determination of exchange rates is employed certain *caveats* must be kept in mind. First, there may be circumstances in which no reasonable rate will achieve equilibrium.[9] A permanent shift in foreign

[6] See *Proposals for Expansion of World Trade and Employment*, Department of State, November 1945.

[7] The Articles of Agreement of the Fund do not seek to prohibit members from controlling capital movements except to the extent that such controls interfere with current trade.

[8] See Ragnar Nurkse, *Conditions of International Monetary Equilibrium*, International Finance Section, Princeton University, 1945, p. 2; see also Frank N. Tamagna, "The Fixing of Foreign Exchange Rates," *Journal of Political Economy*, March 1945, pp. 69 ff.

[9] Unless the sum of the elasticity of demand for exports and the elasticity of demand for

demand for certain commodities, the exhaustion of an important resource, or the development of an alternative source for a major export may require changes in the industrial structure of a country for the reestablishment of equilibrium. A chronic depression in an important industrial country may also require much more than a depreciation of exchange rates in the raw material producing countries in order to correct the resulting disequilibrium in the balance of payments. Unless appropriate adjustments are made in the industrial structures of the raw material producing countries, it may be necessary to maintain a balance by means of trade and exchange controls.

A second qualification with regard to the balance-of-payments approach to exchange rate determination arises from the fact that a country may have an improper exchange rate and still be in a balanced international position. Thus, a country may keep in balance by means of deflationary measures which hold down costs and discourage imports, but which are detrimental to employment. For example, it has been pointed out that there is little indication of a disequilibrium in the British balance of payments during the period 1925–1930 although it is generally agreed that sterling was overvalued. We must, therefore, define an equilibrium exchange rate as one which is consistent with domestic full employment as well as with a balanced international position.[10] This means that if a country is in a depressed condition it should take appropriate fiscal and other measures to increase domestic income and employment and then adopt whatever exchange rate will be consistent with a balanced international position at full employment.

The question has arisen as to whether a country in a depressed condition should alter its exchange rate as a means of increasing employment or whether the country must wait until it has a deficit in its balance of payments before altering its rate. Professor Haberler takes the position that exchange depreciation should be permitted only in the event of the appearance of an actual trade deficit and that for a country to alter its exchange rate before a deficit occurs is engaging in a beggar-my-neighbor policy.[11] Professor Hansen, on the other hand, argues that one of the factors which may be responsible for a country's depressed condition is an overvalued exchange rate which tends to put downward pressure on the domestic cost structure. Professor Hansen suggests a "cost structure parity" according to which a country's exchange rate would be fixed "so that its cost structure will tend to be pushed neither downward nor upward by an artificial rate."[12] According to Hansen a rate which is consistent with

---

imports is less than unity, a sufficiently large depreciation will achieve equilibrium. But the depreciation required for equilibrium may change the terms of trade to an unreasonable degree, e.g., to a $.50 pound sterling or a .1 cent franc.

[10] For discussion of this problem, see Ragnar Nurkse, *op. cit.*, pp. 5–8; see also Gottfried Haberler, "Currency Depreciation and the International Monetary Fund," *The Review of Economic Statistics*, Nov. 1944, pp. 178–181.

[11] See Haberler, *op. cit.*, p. 181.

[12] See Alvin H. Hansen, "A Brief Note on Fundamental Disequilibrium," *The Review of Economic Statistics*, Nov. 1944, p. 182.

equilibrium in a country's balance of payments does not necessarily achieve a parity in the cost structure at home and abroad.

Regardless of its conceptual validity, Professor Hansen's criterion does not offer a very practical guide for the initial determination of exchange rates in the postwar period. There is, however, one point in Hansen's criticism of the balance-of-payments approach which must be dealt with. Hansen points out that a low cost structure abroad relative to the domestic cost structure may contribute directly to the depressed condition of a country even though no trade deficit exists. This might be true in the case of a small country in which the level of prices and business activity was largely dependent upon economic conditions abroad. In such countries internal adjustments alone might not be capable of achieving a high level of employment and activity if prices abroad had fallen relative to domestic prices. Such cases would need to be studied carefully in order to determine whether or not all feasible measures for the maintenance of a high level of domestic employment had been taken before a rate change is recommended.

The test of whether an exchange depreciation actually involves a beggar-my-neighbor policy is whether or not there emerges a surplus in the depreciating country's balance of current payments following the alteration of its exchange rate. This would, of course, be difficult to determine in advance of the de-depreciation. In the light of this difficulty it will ordinarily be advisable for a country first to make the internal adjustments which are necessary for the achievement of full employment and then to adjust its rate for any resulting deficit in its trade balance. This would have the advantage of lessening, or in some cases, eliminating, the impact of the exchange depreciation on other countries.

In a world in which all countries maintain full employment the pattern of exchange rates should be consistent with world equilibrium at full employment. The development of a depression in one or more of the major industrial countries will, however, lead to disequilibrium at the existing rates, and, if this condition persists beyond a reasonable period of time, those countries that continue to maintain full employment and that experience a payments deficit traceable to the depressed conditions abroad should be permitted a rate adjustment sufficient to balance their current international accounts. Countries that have not taken appropriate internal measures for the maintenance of full employment should ordinarily not be permitted to depreciate their currencies even though they are experiencing a payments deficit, and in no case should a country be permitted to depreciate its currency to a point where it would enjoy a payments surplus.

international Reserves should fill in gaps.

What assumptions regarding the level of domestic employment should be made for the initial determination of exchange rates? Since the representatives of the United Nations have agreed under the UNO Charter and the Bretton Woods Agreements to the principle of promoting domestic full employment, and since most countries are likely to enjoy a reasonably high level of employment for the next two or three years, it appears proper to determine the initial structure of rates on the basis of reasonably full employment in all countries.

III

Ideally, the application of the balance-of-payments approach to the determination of a pattern of equilibrium exchange rates would involve an examination of comparative balances of payments for all the countries of the world. Equilibrium rates for all countries would be determined simultaneously on the basis of a detailed analysis of the elasticities of demand and supply of each of the major items in each country's balance of payments. This ideal would be extremely difficult to realize in the light of our present sources of information. It should be possible, however, to employ this same principle on a much less ambitious scale.

The method suggested in this paper involves the projection of hypothetical balances of payments for a posttransitional year for some eight or ten leading trading countries. The remaining countries could be treated as a single unit so far as their trade with the principal trading countries is concerned.[13] Theoretically, it would be possible to determine the conditions for world equilibrium by means of a set of simultaneous equations, but our information regarding the large number of variables and their relationships is probably too limited to warrant the use of *mathematical* techniques. Considerable reliance will have to be placed on the knowledge of commodity and area specialists in judging the effects of relative price changes upon exports of particular commodities. Allowance will have to be made for different types of markets for commodities and for the various types of foreign trading systems employed by exporting and importing countries.

In determining a postwar pattern of exchange rates it is suggested that the rates be appropriate for the posttransition period during which it is hoped most countries will be able to abolish exchange restrictions. In determining rates appropriate for a postwar year, we are confronted by the fact that 1938 was the last year of normal trade, and even in this year trade was influenced by the rapid rearmament of the world. The balances of payments of most countries during the war and the immediate postwar period provide little guide for the determination of equilibrium rates since the pattern of world trade has been quite abnormal and most countries have maintained a balance only with the aid of rigid controls. It is necessary, therefore, to project balances of payments for a posttransition year, say 1950, from a prewar year, say 1938. If we have projections of the balances of payments for the major trading countries on a comparable basis for the year 1950, it should be possible to determine what changes in the prewar rate pattern are necessary in order to achieve world equilibrium.

It is necessary for purposes of analysis to separate the real factors affecting trade, such as changes in productivity, changes in sources of supply, shifts in the pattern of world demand, and changes in real national incomes from monetary factors, such as the changes in the relative level of money prices and costs and changes in exchange rates. This separation is admittedly difficult because

[13] See the Appendix for an "Outline of a Method for Determining a System of Equilibrium Exchange Rates from Comparative Balances of Payments."

relative movements in money prices in some degree reflect real changes. Moreover, as was mentioned above, money prices and costs in most countries since the war began have been highly artificial.

In order to isolate the real factors in the balance of payments, balances of payments should be projected from a prewar year, assuming no change in exchange rates and no change in relative prices and costs of production *except those that reflect changes in productivity or other real factors*. Logically, some allowance for changes in relative costs and prices might also be made in the case of countries that were operating at substantially less than full employment in 1938 and that would be expected to operate at full employment in the post-transition period. This might be considered as a change in relative costs and prices based on real factors.

The next step is to determine what alteration in the pattern of exchange rates would be necessary in order to establish equilibrium for all countries, at least to the extent that equilibrium is theoretically attainable through rate adjustments. This would involve an examination of the effects of changes in relative prices on each of the major elements in the balance of payments of each country. The equilibrium exchange rate so determined for each country will be called the *real rate of exchange*.

The final step will be to correct the equilibrium rates derived from the hypothetical balances of payments for 1950 for the changes in relative costs and prices that have occurred since 1938. This calculation will be subject to some of the same difficulties encountered in a purchasing power parity calculation because of the artificial nature of much of the price data. It is especially important that the real rates of exchange developed from the hypothetical balances of payments be corrected for changes in relative costs in the export industries, but most countries do not have reliable indexes of costs of export goods. Probably the most reliable measure of costs likely to be available is an index of money wage rates.[14] The real exchange rates might, therefore, be adjusted for the relative changes in money wage rates that have occurred since the base period.

IV

The method of exchange rate determination outlined above is admittedly difficult to apply and involves a considerable number of rather hazardous assumptions. Yet it is better to employ a method that is conceptually valid, however tenuous the results, than to employ a simple technique such as purchasing power parity that avoids the fundamental problem. I believe that a pattern of equilibrium rates for the major trading countries could be worked out by a large and competent research staff. Such a project would provide a useful guide and a large amount of relevant information for the determination of the initial pars.

It would probably not be feasible, however, to attempt a wholesale revision

[14] Wage data and wage indexes in different countries are not always comparable. This is especially true during periods of inflation when cost-of-living bonuses and payments in kind valued at nominal prices have been used in lieu of increases in money wage rates.

of present exchange rates by the use of this method. The lack of adequate data and the difficulties involved in projecting prewar relationships into the post-transition period make the degree of probable error too large to warrant using this scheme for the reconstitution of all rates. Moreover, unless the par values communicated to the Fund are considered to be substantially out of line, the Fund is not likely to press for revision at the outset. The Fund Agreement makes ample provision for altering rates after the initial par values have been determined and there will undoubtedly be a number of changes once the initial pars have had time to be tested.

Whether or not an elaborate comparative balance of payments analysis is feasible it would be desirable for the Fund to place primary emphasis on balances of payments rather than relative movements of general prices in determining the initial pars. This approach would involve consideration of the elasticities of demand for the country's major exports, including an analysis of the competitive position of the export industries after the present period of universal shortages has ended.[15] Provided that the country whose rate is to be determined has been able to achieve a reasonable degree of economic stability, it may be assumed that present prices and costs will tend to decline as production improves and temporary shortages are eliminated.[16] Exchange rates based on general price levels for countries whose economies have been greatly disrupted by the war are not likely to be appropriate for the posttransition period. Such rates will tend to hinder the downward adjustment of domestic prices while failing to improve the country's balance-of-payments position sufficiently to warrant the resultant deterioration in the terms of trade.

In deciding upon a proper exchange rate, countries should anticipate a level of prices in the posttransition period which they might expect to achieve without deflationary adjustments that would lead to unemployment. The rate to be determined need not be one that would achieve a balance under present conditions without the continued use of exchange and trade controls. In many instances it would be harmful to the welfare of the country to attempt such an adjustment, if indeed it were possible to do so. The interests of both the individual country and the Fund lie in choosing a rate consistent with a balanced position without the use of artificial controls once normal trade and production have been reestablished.

[15] Today many countries would find it to their advantage to maintain highly overvalued exchange rates because of the existence of an almost unlimited demand for their exports.

[16] In the event that the country whose rate is to be determined is experiencing a severe inflation with stability of prices and wages not yet in sight, it would be futile to attempt to establish a permanent rate. The Fund Agreement provides for the extension of the 90-day period during which the members and the Fund are to arrive at an agreement on the initial rate. During this period the Fund may enter into exchange transactions with the member under conditions determined by the Fund and on the basis of a provisional rate which can be altered at any time by agreement with the Fund. This provision, however, applies only to countries whose metropolitan territory has been occupied by the enemy. See *Articles of Agreement*, Article XX, Section 4.

Appendix

OUTLINE OF A METHOD FOR DETERMINING A SYSTEM OF EQUILIBRIUM EXCHANGE RATES FROM COMPARATIVE BALANCES OF PAYMENTS[1]

I. Prepare a detailed balance of payments for 1938 for about ten leading trading countries on a comparable basis. Treat the remaining countries in the world as a unit and prepare a detailed balance of payments for 1938.

II. Project from the 1938 balances of payments hypothetical balances of payments for 1950, assuming no change in exchange rates and no change in money costs and prices except those that reflect changes in productivity and other real factors.

III. Estimate of imports for 1950
- a. Calculate ratio of retained imports to national income for years in which relevant data are available. Note trend and estimate likely ratio for 1950, taking into account factors that might alter the importance of imports.
- b. Estimate real income for 1950, assuming full employment. Allow for change in level of employment and increase in productivity over 10-year period. Consideration must be given to changes in volume of capital and changes in population trends brought about by the war.
- c. Calculate level of imports for 1950 in 1938 prices.[2] If a substantial change in the ratio of exports to national income is expected, special allowance must be made for a change in imports required as raw materials for exports.
- d. Increase each import item by percentage increase in total imports as calculated in *c* above. Judge the reasonableness of the figure obtained in the light of the conditions of demand and supply peculiar to the particular import commodity under consideration. Special consideration should be given to the fact that in 1938 trade was influenced by rearmament.
- e. Total estimates obtained in *d*.

IV. Estimate of exports
- a. Calculate ratio of exports to world trade for each country during interwar period. Note trend of ratio and changes in ratio with changes in the level of world trade.[3]
- b. Estimate total exports of each country in 1950, assuming a 25 per cent increase in world trade (1938 prices) from the 1938 level, taking account of the trend in the ratio of exports to world trade.
- c. Correct estimate in *b* for geographical changes, and changes in the general productive capacity of the country which would affect its ability to export.
- d. Increase each export item by the percentage increase in total exports obtained in *c*. Analyze each estimate and adjust for changes in
  1. Relative productivity and other factors affecting real costs
  2. Conditions of domestic supply and domestic demand for export goods

[1] The suggested procedure avoids the use of refined statistical techniques. The use of simple and multiple correlation may be desirable as an additional check, but in general the character of the data does not warrant the use of complicated methods.

[2] An alternative method would be to correlate imports with real national income during the interwar period and project the level of imports on the basis of an assumed national income for 1950.

[3] See Randall Hinshaw and Lloyd A. Metzler, "World Prosperity and British Balance of Payments," *Review of Economic Statistics*, Nov. 1945, p. 169, for an index of world income.

3. The pattern of world demand
4. World supply and competitive conditions, including the existence of substitutes

e. Total 1950 exports at 1938 prices.
f. Check estimates of exports against estimates of imports by commodities and by countries and make appropriate adjustments.

V. Reexamine the estimates of real income for 1950 in the light of the estimates of exports.

VI. Invisibles: receipts

a. Shipping (net)
1. Relate shipping income to level of world trade and make a rough estimate of the effects of a given increase in world trade upon shipping receipts (using correlation method or simply making rough estimate from general observation).
2. Estimate change in shipping receipts assuming an increase of 25 per cent in world trade.
3. Adjust estimate for change in shipping tonnage.

b. Dividends and interest
1. Estimate change in real value of equity investments abroad resulting from disinvestment and new investments since 1938 and from destruction brought about by war.
2. Relate income from equities to world income during decade before war and make a rough estimate of percentage increase in income from equities with a 25 per cent increase in world income.
3. Estimate income from equities in 1950 in 1938 prices.
4. Estimate real income from debts (1938 prices) after allowing for defaults, changes in interest rates, etc.
5. Total income from foreign investments.

c. Tourist receipts, insurance, royalties, remittances, foreign government expenditures, contributions, etc.
1. Estimate tourist receipts by relating tourist receipts to world income during interwar period and adjusting for other known factors.
2. Remittances may also be expected to vary somewhat with world income but the level of remittances is determined largely by the pattern of immigration.
3. Receipts from marine insurance may be related to the volume of world trade.
4. Estimate other receipts.
5. Total receipts from invisibles.

VII. Invisibles: expenditures

a. Dividends and interest
1. Estimate changes in the volume of foreign holdings of equities and estimate income from holdings in 1938 prices.
2. Relate income from equities held by foreigners to domestic national income and estimate change in foreign payments for a given change in domestic income.
3. Adjust estimate calculated in 1 for 1950 national income (1938 prices).
4. Estimate real payments on debts held by foreigners after allowing for defaults, changes in interest rates, increased investment, etc.
5. Total payments.

b. Tourist expenses, insurance, royalties, remittances, government expenditure abroad, etc.
   1. Adjust each item for real changes affecting the volume of payments except changes in the level of domestic income.
   2. Adjust tourist expenditures for changes in domestic income as in VII *a* above.
   3. Adjust marine insurance payments for changes in total exports and imports.
   4. Estimate other invisible expenditures and total.

c. Check invisible expenditures against invisible receipts and make appropriate adjustments.

VIII. Exports of domestically produced gold and gold imports
   a. Adjust normal exports for estimated changes in gold production.
   b. Allow for normal gold inflows based on normal percentage of total gold production absorbed by each country.

IX. Long-term capital flows
   a. Add long-term capital imports to total receipts.
   b. Add long-term capital outflows to total expenditures.

X. Determination of real rate of exchange
   a. Make a preliminary study of the elasticity of demand for the exports of each country having a deficit in its 1950 balance of payments and make a rough estimate of the probable change in the 1938 rate necessary to restore equilibrium. All rates should be expressed in terms of dollars.
   b. Review each balance-of-payments item carefully for each deficit country and determine the proper exchange rate, assuming all other rates to be the provisional rates determined in *a* above.
   c. In determining the appropriate rate for each country, examine the effects of the currency devaluation on the balance of payments of each of the other countries. If the bulk of the gain in exports from a devaluation is at the expense of countries that also have an adverse balance, the exchange rate adjustment is clearly incapable of securing a balance for the particular country without aggravating an imbalance elsewhere in the system.
   d. By means of successive trial and error adjustments determine the pattern of real rates of exchange that will give the closest approximation to equilibrium. (It is recognized that some countries will not be able to achieve equilibrium without fundamental adjustments in their economic structure. It will be assumed that such countries will employ appropriate trade and exchange controls for maintaining a balance until more fundamental adjustments are made.)

XI. Adjustment of real rate for changes in money costs
   a. Prepare a composite index of money wages (1938 base) for all countries, excluding the country whose rate is being determined and adjust for any changes in the exchange rates of the countries included in the index. The index should be weighted in accordance with the total trade of each component country.
   b. Multiply the real rate in terms of dollars by the ratio of the index of money wages for all other countries to the index of money wages of the country whose exchange rate is being determined.

WAR AND THE TRADE ORIENTATION OF HAITI

GILES A. HUBERT

Fisk University

In a previous paper an effort was made to demonstrate that the economic *orbit* of the *super-metropolitan agglomerate* which has developed in the Laurentic Basin of eastern North America between New York and Chicago extends to the Caribbean.[1] Producers and consumers who live and work in the area composed by the orbit are mutually dependent for goods and services. The system of exchange is concentrated in the agglomerate, which is the focus of the trade of the entire orbit and the central organization through which normal economic relations within the orbit and with the outside are established and maintained.

The West Indian countries were described as lying on or near the periphery of the orbit and as *marginal* in their trade orientation and in their general economic relations with the New York-Chicago agglomerate. They are less dominated by the trade and financial interests of the agglomerate than other areas which fall more definitely within the orbit, and they have the alternative of trading with this or with some other super-metropolitan agglomerate.

All the West Indies were formerly colonies of mother countries which are part of the super-metropolitan agglomerate of Western Europe and many of them are still colonies politically, if not economically, of European countries. Their economic ties with Europe remain strong and are reinforced by traditional commercial, financial, cultural, and political patterns and associations. As the New York-Chicago agglomerate has grown in commercial and industrial importance and as it has extended its orbit outward, the West Indies have become more and more under the dominance of this newer expanding economic organization and their ties with the old agglomerate have become more strained and weakened.

The entry of the West Indian areas more and more into the new orbit presents problems of reorientation and reorganization which are characteristic of their marginal status. New trade and financial interests conflict with traditional financial structures and trade channels. International conventions and political ties are often survivals of past economic relationships which hamper reorientation. The older economic ties, moreover, are sometimes exceedingly advantageous to the marginal areas and are a mainstay until full integration within the new orbit is accomplished; in other words, until the area ceases to be marginal.

[1] Giles A. Hubert, "A Framework for the Study of Peripheral Economic Areas," *Journal of Farm Economics*, August 1946. In this discussion large urban commercial and industrial agglomerations, such as are found around the North Sea in Western Europe or in the Laurentic basin of North America, were termed *super-metropolitan agglomerates*. The hinterlands or composite trade areas of these *agglomerates* were termed *super-metropolitan orbits*. N. S. B. Gras's definition of metropolitan economy was paraphrased to apply to this new terminology.

War is a great disrupting and disorganizing agent for normal or traditional commercial intercourse and existing financial structures. The disruption of shipping by blockades, aerial and submarine warfare, and the channeling of commerce to fit the strategic and logistic problems of modern war have a disorganizing and a reorganizing effect that is world-wide. In the two world wars, the alignment of warring nations was such that normal trade channels between the Caribbean area and Europe were almost completely shut off. On the other hand, and this is especially true of World War II, the demand for food products and industrial raw materials in the United States and Canada was very great, and since these countries were shut off from Asiatic sources of tropical products and other strategic materials, the Caribbean countries found a greatly expanded market in the United States and Canada not only for old products but also for many new or less developed products of the area. Not only was this new market opened, but financial assistance was forthcoming from the United States for the development of new and expanded production and for the stabilizing of the economies of these raw material producing countries. The result has been the establishment of new trade connections and channels and of new financial arrangements which will condition the economic position of the affected countries for some time in the future or even permanently.

This situation has served to strengthen the economic ties of the West Indian countries with the United States and Canada and has accentuated the rapidity of their incorporation within the orbit of the New York-Chicago agglomerate.

II

The Republic of Haiti is an example of a peripheral economic area, and her recent trade history illustrates the marginal nature of the peripheral economy. In the period immediately preceding the war (1937–1939), 46.7 per cent of her total foreign trade was with the United States and Canada, and 45.9 per cent of her trade was with Western Europe. Of her exports, 34.9 per cent went to the United States and Canada but 61.2 per cent went to Western Europe. On the other hand, 57.8 per cent of her imports came from the United States and Canada, and only 31.8 per cent came from Western Europe.[2]

An analysis of Haitian foreign trade history shows her time-honored economic attachment to France and this has been especially true with regard to her exports. When Haiti was a colony of France, her economy was centered around the production of sugar and coffee, with the emphasis on sugar, as in the other West Indian colonies. But the revolution destroyed the sugar plantations with their expensive capital facilities. Following the revolution, the financial position of the new republic and its strong desire for independence of foreign control forbade the reinvestment of necessary capital to reestablish the sugar plantations.[3]

Coffee, on the other hand, was grown in the highlands and its cultivation could be continued by the new peasantry after the large holdings were sub-

[2] Figures adapted from Bureau of Foreign and Domestic Commerce, *Foreign Commerce Yearbook*, 1938, 1939.

[3] J. N. Léger, *Haiti, Her History and Her Detractors*, p. 294.

divided into small plots and distributed to the families. By this system Haiti hoped to build a democracy based on a family farm-owning peasantry. Coffee thus became the great export crop upon which the Haitian economy depended. Coffee found a ready market in France, which had depended upon its colony for a major part of its coffee supply. Moreover, in return for French recognition of Haitian independence, the new republic was forced to pay a heavy indemnity of 60,000,000 francs ($15,000,000).[4] The financing of this indemnity and subsequent loans floated in France kept Haiti servicing a heavy indebtedness to her former mother country until 1922, when the debt was refunded and transferred to United States investors.

This combination of circumstances, along with language and cultural ties, oriented the Haitian export trade to France. This situation was institutionalized in trade conventions advantageous to both countries, which made France Haiti's principal coffee market[5] until 1936 when France ended her trade treaty with Haiti.

On the other hand, as early as 1890, Haiti was purchasing most of her imports from the United States. In that year Haiti sent $8,437,000 in exports to France while the imports from France were valued at only $918,000. During the same year she sent only $2,289,000 in exports to the United States but imported $6,455,000 worth from the United States.[6] This triangular relationship continued straight through the United States occupation of Haiti and up to 1936. In 1925, for instance, Haiti exported $12,300,000 in goods to France and imported only $1,360,000 worth from her. Meanwhile she exported only $2,300,000 in goods to the United States and imported as much as $15,568,000 worth from this country.[7] During 1934, a depression year, when trade activity was at a low ebb, the trade relationships between the countries remained practically the same.

The explanation of this situation lies in the nature of the exports and imports. Coffee made up the great bulk of Haitian exports during this period. It was the established means by which Haiti serviced her debt to France. The pattern was set and Haiti followed it. Of Haitian exports valued at $5,536,000 to France in 1934, $4,800,000 was in coffee. Haitian cotton has usually gone to the United Kingdom, since the United States is on an export basis in cotton production. Cotton, the second export in importance, was still, however, a minor quantity. On the other hand, Haiti has imported cheap cotton goods, food articles, and manufactures which she could import most cheaply from the United States and Canada. France has never emphasized the production and export of the type of commodities imported by agricultural countries with low living standards.

It was during the first world war, while France's entire resources were in-

[4] *Ibid.*, p. 189. Set first at 150 million francs, later reduced to 60 millions.

[5] Considerable amounts of Haitian coffee were reexported by France to Belgium, the Scandinavian countries, and other parts of Europe.

[6] Léger, *op. cit.*, p. 295 (footnote).

[7] Dantes Bellegarde, *Haiti and Her Problems*, University of Puerto Rico Bulletin, Series 7, No. 1, Rio Piedras, 1936.

volved in her war with Germany and when her threads to the New World were highly precarious, that the first break in Haiti's economic orientation to that country occurred. American financial penetration of Haiti began in connection with the American investment in the bonds of the National Railroad Company of Haiti, which had been created in 1910 to build and operate a railroad from Port-au-Prince to Cap Haitien. It was a dispute between the Haitian government and the National City Bank of New York over the government's responsibility to the bondholders of this railroad, along with a desire to gain control of the Haitian revenue and fiscal system, which was a major factor leading to the American occupation of Haiti in 1915.[8] The reorganization of Haitian finances growing out of the occupation resulted (1) in the transfer of Haiti's foreign debt from France to the United States,[9] (2) the transfer of bonded indebtedness of the National Railroad to the Haitian government, the new bonds being sold in the United States, and (3) the complete control and reorganization of the Haitian National Bank as sole fiscal agent of the government, and control of the collection of all customs duties.[10] This was done purportedly to establish financial order in Haiti and to secure the financial investment of Americans in that country.

This almost complete financial reorientation of the country from France to the United States opened the way for American direct investments in Haiti. Under American influence the new constitution of 1917 removed Haiti's time-honored provision against the ownership of land by persons who were not citizens of Haiti. Early in the occupation period the Haitian-American Sugar Company was organized, which took over a large sugar plantation from German interests during the first world war. It now operates a sugar mill and owns a rum distillery. The investment is estimated at 8½ million dollars. Plantation Dauphin was established later in the 1930's and cultivates between 12 and 15 thousand acres of sisal and operates a sisal shredding plant. The United Fruit Company has invested between 1½ and 2 million dollars in banana plantations, irrigation, grading, and port facilities.

On the other hand, France's interests in Haiti were waning. Following a general movement for empire self-sufficiency, she had been developing coffee production in her own colonies and her financial ties with Haiti were practically ended. The lack of balance between French commodity imports and exports from and to Haiti was an unfavorable situation now that exports were not balanced by debt service from Haiti. So, taking as a convenient excuse a Haitian provision against foreign persons engaging in retailing of certain merchandize items in Haiti, which she interpreted as an undue hardship on French retailers, France denounced her commercial convention with Haiti in March 1936.[11]

This ending of the French-Haitian trade accord was a real turning point in

[8] Emily Greene Balch (ed.), *Occupied Haiti*, chap. II by Paul H. Douglas, pp. 15–19.

[9] *Ibid.*, p. 40. (Loan of $16,000,000; bonds floated in the United States by syndicate organized by the National City Bank of New York.)

[10] *Ibid.*, chap. III.

[11] Annual Report of the Fiscal Representative, Port-au-Prince, 1935–36, p. 3.

Haiti's trade orientation. Since France had been taking approximately two-thirds of the Haitian coffee export Haiti had to set about finding new markets for her coffee. She was able to salvage part of her European market by a new agreement with Belgium on a "most-favored-nation" basis. A new agreement with France gives Haiti a quota of 12 million kilograms annually on the French market, which is but a small fraction of her former imports of Haitian coffee.[12] The big change in the situation is the entrance of Haitian coffee on the American market. In 1935–36 the United States and Canada took only 2.1 per cent of Haitian coffee exports, but by 1938–39 35.0 per cent of Haitian coffee export went to these countries.

This fact, coupled with the production resulting from direct investment in Haiti, the bulk of which has gone to the United States and Canada, established a trend toward greater trade orientation of Haiti toward these countries during the immediate prewar period. In 1935–36 only 9.7 per cent of Haitian exports went to the United States and Canada, but by 1938-39 35.0 per cent went to these countries (see accompanying table). At the beginning of the war, Haiti looked to Western Europe for a market only in the old products which were established in her colonial period (namely, coffee, cotton, and sugar) and this in a lesser degree than formerly. In the new products developed with American capital, her trade orientation was almost completely with the New York-Chicago agglomerate and to this agglomerate she was sending more and more of her principal export staple—coffee. Under the current inter-American coffee agreement with its quota system Haiti can expect a continuance of the American outlet for this commodity.

III

With the outbreak of World War II Haiti's trade with continental Europe, as well as that of other Caribbean countries, was completely disrupted. This had a profound effect on the Haitian economy. Coffee exports to Europe dropped from 19 million kilos in 1938-39 to only 40 thousand kilos in 1940–41.[13] Her cotton exports to Europe were wiped out entirely. Sugar exports did not suffer as much because they went, as usual, to Great Britain, now via the United States and Canada.

To compensate for this loss, the United States and Canada, which took only 9 million kilos of coffee in 1938–39, now stepped up their receipts to 22 million kilos in 1940–41 and as much as 25 million kilos in 1942–43. Haiti found a market for her cotton in other Caribbean countries, principally in Colombia and Cuba. By 1943–44 she was exporting 4.6 million kilos to these new markets, which was equal to her 1938–39 export to Europe.[14]

Prompted by the urgent need for nearby sources of raw materials, the United

[12] *Ibid.*, pp. 31–32.

[13] Figures given are from the Annual Reports of Fiscal Department, Banque National d'Haiti. For a thorough discussion of Haitian trade relations with the United States, see U. S. Tariff Commission, *Foreign Trade of Latin America*, Part II, Section 20. Also Clement Jumelle, *The Competitive Position of Haiti in the American Market*, unpublished master's thesis, Fisk University, 1945.

[14] See footnote 13.

States increased greatly its financial interests in Haiti. The Haitian-American Society for Agricultural Development (Shada) was organized in 1940 for the purpose of financing and directing a war program of agricultural and industrial expansion in Haiti. This is a joint project of the United States and the Haitian governments. It is a Haitian corporation in which the Haitian government subscribed for the entire capital stock ($1,400,000). The Export-Import Bank has extended a credit of $5,000,000 to the corporation and the capital stock is

CHANGES IN DIRECTION OF THE TOTAL EXPORT TRADE OF HAITI AND OF SELECTED EXPORTS* FOR THE FISCAL YEARS 1935-36 TO 1943-44

(Expressed in percentages of the totals in each case)

	1935-36	1936-37	1937-38	1938-39	1939-40	1940-41	1941-42	1942-43	1943-44
Total Exports									
U. S. and Canada	15.0	28.5	42.9	35.0	54.2	91.9	80.2	85.1	76.9
Europe	82.8	68.4	53.5	63.5	44.0	1.3	11.8	6.9	14.0
Latin America	0.6	0.9	1.3	1.1	1.7	3.1	8.0	8.0	9.0
All others	1.6	2.2	2.3	0.3	0.1	3.6	—	—	—
Coffee**									
U. S. and Canada	2.1	17.5	35.1	32.5	56.1	99.7	99.6	98.3	97.3
Europe	97.4	82.3	63.5	66.6	42.9	0.2	0.3	1.3	2.0
Latin America	0.3	0.1	0.4	0.2	0.9	0.1	0.1	0.4	0.7
Sugar**									
U. S. and Canada	16.5	11.2	44.5	5.6	12.0	83.1	0.4	3.4	49.7
Europe	79.5	82.5	49.9	90.7	86.4	16.4	92.3	95.9	49.3
Latin America	4.0	6.3	5.6	3.8	3.6	0.6	7.3	4.0	—
Sisal**									
U. S. and Canada	100.0	94.0	95.8	95.9	99.8	99.6	97.7	97.4	99.0
Europe	—	6.0	4.2	4.1	—	0.4	—	—	—
Latin America	—	—	—	—	0.2	—	2.3	2.6	0.9
Cotton									
U. S. and Canada	—	—	—	—	—	18.0	—	—	—
Europe	91.2	88.0	85.7	100.0	100.0	—	—	—	—
Latin America	—	—	—	—	—	30.9	100.0	100.0	100.0
All others	8.8	12.0	14.3	—	—	51.0	—	—	—

Source: Calculated from figures in the Annual Reports of the Fiscal Representative and of the Fiscal Dept. of the Banque National d'Haiti, 1935-36 to 1943-44.

* Bananas, a major export since 1936, have gone almost entirely to the United States. Rum and cacao, other exports, have shown little significant change as to destination.

** Exports of coffee, sugar, and sisal to all other areas amounted to insignificant quantities.

turned over to the Export-Import Bank as security for the loan. Shada's budget in 1943 amounted to $12,000,000. Three members of the board are Haitians and three are United States citizens. The manager and principal officers of the concern are Americans.[15]

[15] Primary source of materials regarding Shada are the annual reports of this agency. Brief discussions may be found in George H. Soule, David Efrom, and Norman T. Ness, *Latin America in the Future World*, pp. 277-278, and Seymour E. Harris (ed.), *Economic Problems of Latin America*, pp. 363-364.

Shada immediately took over Plantation Dauphin and extended the area of sisal plantings. New sisal shredding plants were constructed at Cap Haitien, St. Mark, and Mont-Rouis. Sisal exports increased from 7.5 million kilos in 1938–39 to 11.6 million kilos by 1941–42. Shada has developed a new lumber industry in the pine forests of Southeast Haiti, where 300,000 board feet of lumber are being turned out monthly. While most of this has gone for local construction, exports of lumber were beginning by the war's end.[16]

The most spectacular activity of Shada has been its rubber development project. A total of some 47,000 acres, or approximately one-twentieth of Haiti's arable land, was planted to cryptostegia vines and to hevea and castilla trees. Although as a result of this program Haiti was able to export some rubber, the difficulties of harvesting latex from cryptostegia and the development of synthetic rubber production in the United States have caused complete abandonment of the cryptostegia project. The trees planted, however, should provide for increased rubber exports in the future.

The net result of all this has been a closer association of the Haitian economy with that of the United States and Canada, that is, within the New York-Chicago orbit. Where in 1938–39 only 35 per cent of Haitian exports went to the United States and Canada and as much as 63.5 per cent went to Europe, by 1942–43, 85.1 per cent went to the United States and Canada and only 6.9 per cent went to Europe (see accompanying table).

Another striking result of the wartime situation in Haiti was her increased trade with other Latin American countries. Mention has already been made of the new markets for Haitian cotton in Colombia and Cuba. But her trade has also increased in regard to several other less important export items and in regard to imports from Latin-American countries, notably rum, handicrafts, and rice among the exports and textiles, oil, and tobacco products among the imports. In 1943–44, for instance, 15.8 per cent of Haitian imports came from Mexico—principally cotton goods. In 1939–40 only 1.7 per cent of Haitian exports were to Latin American countries, but by 1943–44 these had increased to 9 per cent (see accompanying table). In 1940–41 only 4.4 per cent of Haiti's imports came from Latin America, but by 1943–44, 24.6 per cent of her imports came from this area.[17]

It is therefore clear that the war situation did seriously disrupt old trade ties between Haiti and Europe and that it has accentuated the prewar trend of her commercial association within the North American orbit. It is expected that she will endeavor to recapture as much as she can of her former markets in Europe, especially for coffee. But the new investment and the new export production are geared to the newer economy. New products, new trade channels, new investment, new markets, all in the New World, mean that Haiti is becoming less marginal and more integrated in her trade orientation.

[16] Eugene Swan, Jr., "Haiti Builds an Industry," *The Inter-American*, March 1946.

[17] Figures for imports are from U. S. Tariff Commission, *The Foreign Trade of Latin America*, Part II, Section 20, "Haiti."

IV

The effect of this trade reorientation on the internal economy of the Haitian nation is a story in itself, a detailed discussion of which cannot be attempted here. A few of the broad outlines of internal change might be indicated, however.

Probably the most far-reaching affect of the reorientation on Haiti's internal economy has been the abolition of peasant holdings in the greater part of the most fertile portion of her agricultural land. The large commercial farms established by the Haitian-American Sugar Company, Plantation Dauphin, by the Standard Fruit Company, and now by Shada have meant the displacement of thousands of peasants from their holdings.

Haiti among all the Caribbean territories has been the one most insulated against the shocks of severe changes in world market situations. Although coffee has been her great export mainstay and the source of governmental and other cash revenues, Haiti's economy has been characterized by the self-sufficiency of the great bulk of its population—its peasantry. The rationalization of agricultural production to the new export orientation is changing this basic aspect of the Haitian economy. From a more or less independent self-sufficiency status, at an admittedly low level of living, which was becoming lower because of increased population pressure, many peasants have become 30¢ per day wage earners on large plantations, with all the social concomitants and insecurity which come with such a status.[18] The worker is seriously affected now by such things as unemployment, mobility of the working force, prices in their relation to wages, markets, and war. His standard of living is now dependent directly upon what he can buy with the wages he earns.

Closely associated with the reduction of peasant holdings has been a reduction of the home-produced national food supply potential. Up until the war Haiti had been making strides toward almost complete self-sufficiency in its national food supply. This still may be attained with improvement in production variety and efficiency in the upland and plateau regions. But the taking of thousands of acres of the best Haitian land out of food production and the devotion of this land to such items as sisal, rubber, and bananas for export reduces, at least temporarily, the food-producing capacity of the country. This has been seriously felt during the war period, when food imports were greatly reduced and the nation's food supply was strained. With the increase of the national monetary income, the result was inflation and a rising cost of living.[19] This rising cost of living has been a severe handicap to the new wage earner who was formerly a peasant and has probably accounted for much of the reported desertion of jobs and returning to the mountains on the part of many of the workers.

A more favorable result of the changed economic situation has been the expanded internal tax base as a result of the increased number of monetary incomes

[18] Harris, *op. cit.*, p. 365.
[19] *Ibid.*

and the resultant expenditures. This has meant the possibility of less dependence of the government on customs as a source of revenue and a gradual increase in the internal revenues. In 1919-20, for instance, during the early years of the American occupation, 96.1 per cent of Haitian revenues were from customs. By 1935–36, this figure had been reduced to 83.6 per cent, and by 1943–44 only 73.1 per cent of Haiti's revenues came from customs sources.[20] As long as the incomes of the great mass of the people are in terms of self-produced food, clothing, and implements, there is little for government to tax. The situation changes with the increase of monetary incomes.

A short-time adjustment problem has resulted from the abandonment of the vast areas planted to cryptostegia. It may easily be said that the former peasantry could reoccupy this land. But the typical peasant holding in Haiti has its principal capital in food and beverage producing trees which must be planted and allowed to reach maturity before they produce an income. The cryptostegia plantations destroyed all this. Wherein this situation may present an opportunity to redivide the land and establish more adequate peasant units, it will take considerable capital and a more commercial type of agricultural production to amortize the capital investment.

Only a few of the changes brought to Haiti's internal economic structure as a result of trade reorientation have been indicated. They are sufficient, however, to illustrate the type of problems which face a marginal economy in going through a process of trade reorientation. Such problems will continue in Haiti until she becomes more completely oriented within the New York-Chicago orbit; that is, until Haiti ceases to be marginal.

[20] Max Etheart, *The Revenue System of Haiti*, unpublished master's thesis, Fisk University, 1945.

BOOK REVIEWS

Transportation Principles and Problems. By Truman C. Bigham. New York: McGraw-Hill Book Co., 1946. Pp. xviii, 646. $5.00.

It is safe to predict that Professor Bigham's *Transportation* will be widely adopted as a college textbook and widely used in nonacademic circles as a work of reference. The author tells us in his preface that "special attention has been given to the needs of teachers and students in universities and colleges," and his finished product shows the virtues for which one looks in a textbook. The work is up to date, orthodox in content, slightly novel in arrangement, well indexed, and adequately cross-referenced. The annotated bibliographies are unusually complete, and the whole is garnished with a list of available 16 mm. films on transportation topics.

The author has a second ambitious goal, ". . . to promote the establishment of more rational transportation policies." In this respect, his emphasis is on public control rather than on carrier organization and operation. Within the field covered, it can be said at least that he raises the right questions, and that either the text or the footnote references usually present both sides of these questions. Probably no reader will find all Professor Bigham's proposals "rational," and perhaps the author intended to imply no more than that he hoped to promote rational thinking about transportation policies.

In arrangement, the distinctive feature of this text is that it cuts across transport agency lines. The chapters are organized around functional topics; for example, the chapter on transportation costs covers rail, pipe-line, air, waterway, and highway carrier costs. Discussions of the different types of carriers are interlaced through the book from chapter to chapter, and the strands are finally tied together in a consideration of "future regulatory and promotional policy." In execution, one result is an unusual number of cross references, anticipatory as well as retrospective. College students may be depended upon to ignore these, unless the instructor wishes to emphasize them for pedagogical reasons.

The attempt to treat all forms of transportation as parts of an interrelated system strikes the reality that the differences between the types of carriers are as great as the similarities. Professor Bigham's arguments come out to the conclusion that all for-hire carriers should be regulated by the Interstate Commerce Commission, but that "the same sort of regulation need not be imposed upon every type of carrier, and the same rules need not be applied to every situation." He does not discuss the moot question as to whether the long experience of legislatures, courts, and commissions with the regulation of railroads has led to a tendency to measure the newly regulated carriers against a Procrustean bed of inappropriate precedents.

Although the exposition does not avoid theory, the approach is essentially historical rather than Euclidean. The author sums up his own account as indicating that "the major regulatory statutes have been enacted, sometimes over strong opposition, in response to real needs." Government ownership would

not be "so calamitous as sometimes pictured," but it is not now warranted, and it is not likely to be adopted unless private enterprises fail to pursue policies essential to the maintenance of their credit. However, comprehensive public control should be continued. The inference, therefore,is that "rational" policies are fundamentally the policies we have now.

Within the framework of private ownership and government regulation, however, the author suggests numerous modifications of present public policy. The authority of the Civil Aeronautics Board should be transferred to the Interstate Commerce Commission; the Commission should be given jurisdiction over rate-making bureaus; and it should have permissive (rather than mandatory) authority to pool the proceeds of horizontal rate increases, also to permit integrated companies that will engage in more than one mode of transport, and to promote voluntary unification of railroad systems. Publicly owned transportation facilities should be financed by user payments. Negatively, to place the regulatory function under a Secretary of Transportation in the President's Cabinet would be "a dangerous move."

Although the proposals just enumerated are those that are segregated for special attention in the final chapter, they are not any more controversial than some other judgments found scattered through the text. We are told, for example, that the Hoch-Smith Resolution "represented a dangerous interference by Congress in rate-making," that "the financial structure of a company should be taken into consideration in arriving at the fair rate of return," that "present differences in the territorial levels of railroad class rates are greater than can be justified by variations either in the cost of service or in the composition of traffic," and that "the Railway Labor Act has been reasonably successful."

Probably the most revolutionary proposal in the entire book, however, is that competitive rates should be based on fully allocated costs. "Discretion is of course required in the ascertainment of costs," Professor Bigham states, "but there is less need for the exercise of opinion than when adjusting rates on the basis of demand." In another connection, he asserts that ". . . the Commission should be permitted gradually to place rates more nearly on a distance basis." To these generalizations he does indeed admit several exceptions; but the application of his principles, including the exceptions, would profoundly change our present geographic distribution of industry, which in so many instances is buttressed by a system of rates based on charging "what the traffic will bear."

Washington, D. C. HAROLD KELSO

Railroad Consolidation under the Transportation Act of 1920. By William N. Leonard. New York: Columbia University Press, 1946. Pp. 350. $4.00.

This well-written and fully documented issue of the Columbia University Studies in History, Economics, and Public Law deals with planned railroad consolidation in the United States from its beginning in 1920 until its termination in 1940. After a brief description of railway consolidation before 1920, the author analyzes in order the consolidation provisions of the Transportation Act of 1920,

the Ripley Report, the Tentative Plan and the hearings thereon, the reaction of the Interstate Commerce Commission toward these hearings, the actual course of combination during the 1920's in the various regions of the United States, the Complete Plan of Consolidation, the Four-Party Plan of the early thirties, the Emergency Railroad Transportation Act of 1933, the efforts of the Federal Coordinator of Transportation to promote consolidation and coordination, the activities of the railroad companies between 1933 and 1940, the abandonment of government planning under the Transportation Act of 1940, reasons for the failure of consolidation, and the outlook for unification. The tentative and final plans of the commission are printed in appendixes, after which follow a selected bibliography on railroad consolidation and an index.

Students of transportation as well as those of economic planning should profit from reading this account of a 20-year experiment in the government's shaping of a private industry. Concerned primarily with the obstacles to railroad consolidation, and written from the vantage point of hindsight, the book supplements the other special studies of consolidation. Grdinsky's *Railroad Consolidation* is essentially an analysis of the business motives underlying combinations, and Splawn's *Consolidation of Railroads* was published soon after the Transportation Act of 1920 became effective.

The central thesis of *Railroad Consolidation under the Transportation Act of 1920* is that again and again during two decades the efforts of Congress, of the Interstate Commerce Commission, of the Federal Coordinator of Transportation, and of others to bring about thoroughgoing consolidation of the railroads of the United States without the use of force have been defeated by the self-interest of the railway corporations and promoters. The stronger companies have struggled for the control of strategic or profitable lines, frequently engaging in financial excesses, but have evinced little interest in the weaker railroads. Although the author recognizes other obstacles, the key to the failure of planned consolidation is found to be the hopeless conflict of private interests. Among other hindrances listed are unsettled business conditions and a weak railroad credit, statutory imperfections, hesitancy on the part of the Interstate Commerce Commission, and the opposition of labor and particular communities.

The author concludes that it is wishful thinking to expect thoroughgoing voluntary railway unification. He therefore advocates compulsory consolidation, accepting rather uncritically the proposition that substantial economies can be achieved thereby without serious disadvantages. British experience is cited in support of compulsion and is viewed, perhaps erroneously, as a means of averting public ownership in Great Britain.

In the opinion of the reviewer, the author has correctly evaluated the chief stumbling block to voluntary consolidation according to a plan embracing all lines. The evidence is convincing. The assumption that significant advantages can be realized through consolidation also seems reasonable. However, there are disadvantages. The problems of management would almost surely be intensified if unification were complete, and consolidation on a regional basis would accentuate the present unevenness of competition. The author's statement on page

286 that the rapid development of other carriers has completely destroyed the arguments for a policy of enforced railway competition is too sweeping. This development has lessened the force of the arguments, but competition between railroads and other modes of transplortation is effective only within limits and does not altogether eliminate monopolistic power on the part of the railways.

Even if it be granted that a net gain would arise from comprehensive unification, as seems likely, compulsion, at least on a drastic scale, is not necessarily the best policy to adopt. Although the past record has been discouraging in many respects, perhaps it would be well not to become impatient, giving the companies another chance, so to speak, under more auspicious circumstances, provided the Interstate Commerce Commission will play a somewhat more positive role in consolidation. Compulsion is fraught with serious practical difficulties, among them valuation for purposes of combination. Voluntary unification will probably be slow, especially in absorbing weak lines, yet there are other ways of dealing with the strong and weak road problem. One method which has not been fully exploited is the pooling of the proceeds of general rate increases. In some cases weak companies can be reorganized or otherwise strengthened, thereby making them more attractive to the stronger carriers. Certain factors affecting consolidation are now more favorable to voluntary action than under the Transportation Act of 1920. The statutory provisions governing unification are less inflexible, and the authority of the Interstate Commerce Commission has been broadened to cover holding companies. If necessary, additional legislation can be passed giving the commission power to initiate and participate in plans for combination and to curb recalcitrant minority stockholders.

University of Florida TRUMAN C. BIGHAM

Planning for Jobs. By Lyle Fitch and Horace Taylor. Philadelphia and Toronto: The Blackiston Co., 1946. Pp. x, 463. $3.75.

It will be remembered that the contest for the Pabst Postwar Employment Awards brought out a field of nearly 36,000 entries. Plans were submitted by men and women from all walks of life and embodied ideas that varied from extremes of radicalism to the heights of conservatism. While the 17 prize-winning plans were published in a pamphlet entitled *The Winning Plans in the Pabst Postwar Employment Awards*, the editors of the present volume believed that the other essays constituted a unique cross section of public opinion on employment that merited analysis and public consideration. The result was a selection of approximately 200 of the proposals contained in the contest essays. "In selecting these proposals" the editors state that "the usual standards of economic and political orthodoxy have been largely ignored" (p. vi) and items were included for the most part "because they are ingenious and interesting, aside from questions of immediate practicability, or because they illuminate various aspects of the employment problem" (p. vii). Care was taken to present all points of view in controversial questions.

As far as possible, the language of the original essay has been retained. Although each proposal is prefaced by a summary and a brief sketch of the back-

ground of the author, it is difficult to match the contribution with the name of the contributor contained in the alphabetical list of authors; for instance, "A Harvard professor of business research proposes a nation-wide publicity campaign to induce businessmen to adopt the policy of providing more goods to more people at less cost" (p. 169), and "A Navy lieutenant from Washington, D. C., develops a plan to make vacationing one of the principal new industries of the postwar world." The process of elimination that might identify the Harvard professor could not possibly be employed to bring to light the name of the nautical gentleman.

The plan of the book is clearly stated in the introductory section (pp. 1–2). The principal issues of employment and unemployment in modern society, the problems and implications of employment planning, and criteria by which the plans may be judged, as viewed in the light of present-day economic theory and analysis, are discussed by Mr. Taylor in chapter 1. But at every point the economic policy maker must give far more consideration to public opinion than is required of his more autocratic counterpart, the military strategist. What the public, as represented by those contributing to the contest, think about the various aspects of employment policy is analyzed by Mr. Fitch in chapter 2. These two chapters are offered as an introduction and a background to the proposals and suggestions, the "battle plans," which comprise the remaining chapters of the book.

Mr. Taylor's chapter on "Employment in the Modern Economy" defines the problem and outlines the main characteristics of both the laissez-faire and interventionist solutions. The last chapter (pp. 33–40) summarizes the criteria of good employment plans: (1) plans have to take account of people, not merely of a "mechanism" or a "system"; (2) plans must be flexible; (3) plans should aim at useful production as well as increased employment; (4) plans that aim at increased employment by private business must not ignore the profit incentive; (5) plans should not seek to stimulate employment by *cheapening* labor; (6) plans for domestic employment must take account of international relations, both economic and political; (7) plans should be as uncomplicated as possible; (8) plans for employment must be consonant with other public policies, and vice versa. Mr. Taylor's two remaining propositions deal with conditions necessary for the successful operation of any plan, namely: (9) plans must "follow through" and (10) employment planning calls for public responsibility and economic knowledge.

The organization of the 200 proposals follows a main division between proposals dealing primarily with the demand for labor and proposals dealing primarily with the supply of labor. Under the first category are listed measures to increase (a) private investment and production, (b) private consumption, and (c) the government's purchases of goods and services. The second category includes measures to (a) increase the occupational and locational mobility of labor, (b) eliminate friction in the labor market, and (c) limit the supply of labor and share the work.

The popular support of the various proposals is well brought out by Mr. Fitch in his chapter on "What America Thinks About the Job Problem." "Among the

writers expressing themselves, the opinion prevails that unemployment will be a permanent or, at least, a long-term problem, and that action to prevent unemployment should be regarded as a regular function of the Government. A few writers said that the Government should intervene only as a last resort, but only a very few expressed the belief that the Government should steer clear of the problem entirely. . . . On the whole, however, it seems fair to say that there is little real belief in an automatic self-adjusting economy and little demand for a return to 'normalcy'. But the emphasis on Government does not necessarily mean that people are ready to surrender centralized authority or that they have lost faith in private business and initiative. Probably it means rather, that they recognize the seriousness of the scope of the problem and believe that a solution can be insured only by the participation of the strongest agencies we possess" (p. 45).

The great merit of *Planning for Jobs* is the insight that it affords at the beginning of the postwar decade on American opinion concerning perhaps the most pressing problem of our time. Sufficient background has been given to enable the ordinary reader to understand the nature and significance of the various proposals. The wide choice of materials and the conflicting points of view should not fail to stimulate group discussion and aid in the development of an objective, scientific approach to the problem of economic reform.

University of Virginia D. Clark Hyde

The Wages of Farm and Factory Laborers 1914–1944. By Daniel J. Ahearn, Jr. New York: Columbia University Press, 1945. Pp. 245. $3.00.

This study should prove of interest to students of labor and wage questions in the Southeast and the Southwest. For in these two regions are to be found the bulk of the relatively underemployed agricultural industrial reserve army in existence in the United States. For in these two regions net reproduction in rural areas remains relatively high, while the number of persons directly dependent upon agriculture for a livelihood exceeds in much greater measure than elsewhere the number for whom an efficiently conducted agriculture could provide a plane of living commensurate with urban standards. Accordingly, in so far as labor is mobile between agriculture and nonagricultural employments in the South, wages will tend to be lower in southern industry than elsewhere; and labor will have to be mobile if the excess agricultural labor supply is to be absorbed rapidly by industry. For the actual influences of this overhanging agricultural labor supply upon the wage structure, one may turn to Professor R. A. Lester's studies published in this journal, and to the studies of Professor John D. Black.

Most of Dr. Ahearn's study centers about the fact that the wage rates of factory laborers doubled between 1914 and 1939 whereas those of farm laborers hired by the day without board increased only 9 per cent. The increase in factory wages reflected the increase in output per man-hour, together with the fact that the demand for the products of factory labor was sufficiently elastic through time to absorb the increasing output at comparatively unchanged relative prices. Farm wage rates, on the contrary, rose very little despite an increase in physical output; "they rose and fell in accordance with successive

changes in the selling price of farm products," with about a year's lag. Accordingly, if the demand for farm products falls as in depression periods, or if agricultural production is augmented in the face of a comparatively inelastic demand for farm products, agricultural prices move downward and farm wage rates move down with agricultural prices. When an opposite set of conditions prevails and farm prices move upward, farm wage rates advance in sympathy. Because the oversupply of farm laborers has been most pronounced and most persistent in the Southeast it is there that adverse influence upon farm wage rates have been felt most keenly.

At present, of course, the situation of the farm laborer is very much improved, because with the increase in agricultural net income since 1939 his remuneration has increased. Dr. Ahearn concludes, however, that farm wage rates will begin to decline when farm prices decline, the degree of decline in the former depending upon that in the latter. "For farm laborers the future does not seem so bright." He anticipates also that factory wages will decline in the postwar period, the degree of decline depending in part upon "the economic strength of organized labor, the wage policies of government on its own construction projects," and upon the wage policies of business management.

Considerable tabular material, a bibliography, and index are included.

Duke University JOSEPH J. SPENGLER

Labor Unionism in American Agriculture, by Stuart Jamieson. Washington, D. C.: United States Department of Labor, Bureau of Labor Statistics, Bulletin 836, 1945. Pp. 457. 5 cents.

As indicated in the letter of transmittal to the Secretary of Labor, this report "brings together hitherto scattered materials much of which was previously not available. It traces the changing character of agriculture in this country and the conditions that have given rise to labor unrest."

The report consists of 23 chapters and numerous appendixes. The first three chapters are devoted to a discussion of the history and development of agricultural labor unions in America. As compared with industrial unionism, labor unions and strikes in American agriculture have been small, sporadic, and scattered.

By 1800, farm wage earners had come into existence but they had not become a class for the relationship between employer and employee was close. During most of the 19th century, a farm laborer could, if he chose, push westward to new lands and become an operator. By 1870, it had become apparent that certain land areas were adaptable to "industrialized" methods of production and by 1930 "mass production" agriculture was common in many sections of the country. Farm managers replaced owners and the employer-employee relationship was intensified as absentee owners and hired managers tended to view the wages of labor primarily as a cost which should be kept to a minimum to insure profitable operations.

The first concentrated effort to organize farm workers on a nation-wide basis was undertaken by the Industrial Workers of the World. The I.W.W. attempted

to organize unskilled mass production workers and agricultural workers. Its greatest success was in those regions which had long experienced farm-labor conflict. The structure of the organization was heterogeneous, including many occupations other than farm labor. The radical views of this union led to its suppression by the federal government and by vigilantes during the period of the First World War.

In the early thirties the Trade Union Unity League of the Communist Party attempted to build up a revolutionary federation in opposition to the A. F. of L. The T.U.U.L. soon absorbed many local unions in agriculture. It sponsored 61 strikes of almost 57,000 farm workers in 1933, most of which were unsuccessful and many of which were suppressed by organized grower-employers. By 1935 the Trade Union Unity League was formally dissolved. The organizing tactics used by some agricultural unions and methods frequently used by vigilante mobs and law enforcement officers in the suppression of strikes and organizing efforts in various sections of the country are clearly shown by the author as a dark page in American democracy.

Following 1935 agricultural unionism was more commonly associated with the A.F. of L. and the C.I.O. In 1936 the executive council of the A.F. of L. conferred with a group of agricultural delegates and requested them to submit to President William Green a financial plan for organizing a national union of agricultural and allied workers. He refused to charter a new international for agriculture, at least in the immediate future. Hesitance on the part of the A.F. of L. to take positive action ultimately led to a swing toward the new C.I.O. In July 1937 delegates from 24 states, representing 56 different independent and A.F. of L. federal labor unions, met in Denver. An international union was established and chartered by the C.I.O. as the United Cannery, Agricultural, Packing and Allied Workers of America. During the next two years the union grew rapidly and made substantial gains particularly in processing industries related to agriculture. By the end of 1938, however, the U.C.A.P.A.W.A. had divested itself of many locals composed of field workers. This step was taken in the interest of economy and indicates at least a partial failure in this activity. While the C.I.O. was turning its attention away from the field workers, the A.F. of L. in California established a National Council of Cannery and Agricultural Workers which was quite successful in organizing processing workers and gaining the recognition of several independent unions of field laborers. With the advent of war and the necessary expansion of industrial production, both the C.I.O. and A.F. of L. turned their efforts largely to key urban industries.

From 1930–39 the reports show 275 strikes involving 177,788 agricultural workers. Fifty strikes involved over 1,000 workers and 34 out of the 50 occurred in California. By crop, two-fifths of all strikes in America occurred in peas and cotton.

The report continues by presenting a history of the agricultural labor movement in the various states or regions The study is exceedingly well documented, much of the information being drawn from the hearings of the LaFollette Civil Liberties Committee. Woven into the geographical study of agricultural

unionism are chapters dealing with the Sheep Shearers Union of North America and the I.W.W.

The report concludes that the conditions which made if difficult for seasonal farm workers to organize were the same conditions that made them vulnerable to agitation and strikes, "the true 'forgotten men' of the thirties."

Further widespread labor-employer conflict in agriculture is likely to recur if prosperity and full employment are not maintained. Little has been done to bring a long-run improvement in wages, living conditions, job security, and opportunity for advancement on the land. Further commercialization of agriculture would intensify the conflict. In the long run the author anticipates closer cooperation of farm labor, small farm owners, and industrial labor for unified political action.

Park Ridge, Illinois JOHN T. MASTEN

Der Staat und die Kartelle. By Dr. Emil Eggmann. Zurich: Dr. H. Girsberger Verlag, 1945. Pp. xii, 224. Fr. 15.

This is a volume published in the series called *Züricher Volkswirtschaftliche Forschungen* (Zurich Economic Research Studies), edited by Professor Manuel Saitzew of the University of Zurich. A few years preceding and during the Second World War there were not many outlets for unbiased economic research in German. In spite of unfavorable conditions Professor Saitzew succeeded in bringing out several valuable research papers.

Mr. Eggmann's book contains a comparative study on government policies of various nations related to domestic cartelization. Thus it touches only in passing on international cartels and on monopolistic patterns other than the domestic market combinations of independent private businessmen. The author deliberately disregards the profit interest of private entrepreneurs and focuses his investigation on the aspect which is customarily designated as the public interest. The main sections of the volume are restricted to facts and factors belonging to the pre-Second World War period and only a short final chapter discusses postwar cartel problems. The author obviously includes in his cartel concept intergovernmental commodity agreements (p. 218).

The first section is devoted to the historic development of public cartel policies, the second to the nature and inherent limitations of state interference, the third section discusses various kinds of traditional cartel policies.

Dr. Eggmann advocates active interference by governments in private transactions covering market restrictions. Such governmental measures, he thinks, would prevent unnecessary rigidities on markets, abuses resulting from concentration of economic power in private hands, high prices resulting from monopoly profits, and political abuses. In the opinion of the author, cartel policies of governments ought to be adjusted to individual situations, that is to say, the government would investigate in each case to find out whether or not a workable pattern of competition were desirable and feasible. Mr. Eggmann justifiably points to the inadequacy of general legal regulations in the sphere of economic life in almost all democracies. The responsibility of businessmen with reference

to the public interest needs to be made more explicit. It appears that Mr. Eggmann opposes both cutthroat restriction and cutthroat competition.

The study is principally founded on the abundant cartel literature available in German. The source material in other languages seems to be incomplete. Indeed, the emergency circumstances made it difficult to procure basic material. This fact influenced the judgments of Mr. Eggmann. More references to actual cases would have elucidated the author's somewhat too brief propositions and saved him from certain oversimplifications. In addition to familiar data the study contains much new and useful information. His judgments show familiarity with this somewhat overworked topic. It is highly probably that future studies of Dr. Eggmann on this subject will measure up to this initial venture.

University of North Carolina ERVIN HEXNER

A Price for Peace. By Antonin Basch. New York: Columbia University Press, 1945. Pp. 209. $2.50.

Professor Basch's topic is the analysis of the world economic situation at the end of the war and the outline of the proper international economic policies to restore prosperity and security to the world.

A book that has been written in and before 1945 in some respects is bound to be obsolete at this date. Yet there is much in the author's poised, wise, and competent discussion that remains of great value.

We mention in this connection the statistical survey of the structure of Europe's international economy and of its relationships with the continents and countries outside of Europe up to 1939. We mention further the interesting discussion of the progress of industrialization in Latin America, Australia, Africa, and parts of Asia and of the repercussion of these developments on England and the future chances of her export trade.

Much of the book is devoted to a forecast of the economic situation following the war and the economic policies required by that situation. Even where the author has not been borne out by events this is no reflection on the wisdom and competence of his diagnosis and of his recommendations. But rather it is, in the light of later events, a sad commentary on missed opportunities and a slow, painful, and uncertain approach to the problems of world organization. The contrast between what in 1945 appeared as reasonable hopes and possibilities and the actual accomplishment that followed is indicated by the frequent reference of the author to the confident expectation at least of all victorious nations in Europe to lead after the war not only safer but also better and more comfortable lives. Particularly interesting and still of high concrete value are the sensible recommendations for the settlement of the German problem which steer equally clear of sentimentalism and of vindictiveness and see the German question in the proper perspective; namely, in that of the key to the economic and political reconstruction of Europe.

In one respect the author may be said to lay himself open to serious criticism. Though he recognizes the fact that the nations of the world will emerge from this war with widely different and often with more or less socialistic political and

economic systems, he slides too lightly over the crucial problem of reconciling the contrast between more individualistic and more collectivisitic economic systems in a coordinated multilateral world monetary and trade system.

Duke University HERBERT VON BECKERATH

Industrialization and Foreign Trade. By Folke Hilgerdt. Geneva: League of Nations, 1945. Distributed by Columbia University Press, New York. Pp. 167. $2.15.

The object of this useful and informative study is to depict and analyze the "effects of the industrialization of undeveloped countries on the foreign trade of the older industrial countries." Attention is given to the basic facts and trends, to the nature of the industrialization process, to the determinants of industrialization, and to the movements of industrialization and international trade in general and in particular countries. A summary, together with two largely statistical appendixes, is included.

The implications of this volume (which is complementary to an earlier League of Nations study, *The Network of World Trade*) may be examined in light of the findings of Professor Norman Buchanan in his recent works in the field of international trade. This volume should prove useful to students of economic geography, demography, and international living standards, since industrialization constitutes the principal key to the solution of the world population problem and the associated problem of disguised unemployment.

Contrary to lay opinion, the net aggregative effect of the industrialization of undeveloped countries upon the exports and industry of exporting industrial countries does not tend to be adverse on the whole even though it may affect the situation of some exporting industries adversely. For in theretofore undeveloped or little developed countries industrialization stimulates the production of primary products, increases purchasing power, and tends to augment the over-all demand for imports This tendency appears to be sufficiently strong to triumph over moderate tariffs and related controls Some industries in exporting countries are affected adversely, however, in so far as the composition of the import stream of the newly industrialized countries changes, even though manufactures and imports per capita expand together. "The real danger that the older industrial countries may have to face is not the spread of industry throughout the world but the failure to restore multilateral trade, or its collapse when once restored (p. 119)." This conclusion, of course, is in line with accepted trade theory.

The industrialization process is subjected to analysis, but not to as much as one would have liked and as economic history stands in need of. As yet because of the overweening concern of economics with statics it has not provided a satisfactory theory of economic development, an aetiology of economic growth in terms of which prospective development could be forecast with a high degree of accuracy.

The obstacles to industrialization in sparsely populated countries differ somewhat from those in densely populated countries. In the former, economies of

scale are difficult to realize because the domestic market is limited. Their industrialization may therefore be more readily facilitated through the expansion of foreign trade and the consequent stimulus to the development of internal transportation, the accumulation of domestic savings, and the importation of capital. In densely populated countries industrial development has a good chance for success when the industries initially established are small scale, decentralized, and suited both to utilize the relatively abundant supply of labor and to economize in the use of relatively scarce capital and natural resources. If industrialization gets under way, social values and administration undergo change and agriculture is reorganized and rendered more productive. Capital for industrial development must come largely from domestic sources, yet these are greater than it appears at first sight. While tariff protection cannot be relied upon to contribute much to industrialization, social rejuvenation, hygienic improvement, general and technical education, agricultural reform, and capital for the development of transportation and utilities are necessary.

It is to be hoped that the United Nations will prosecute even more effectively than the League of Nations the able research activities conducted by the latter, of which the volume under review is but one of a large number of studies and reports and compendiums.

Duke University JOSEPH J. SPENGLER

Economic Demography of Eastern and Southern Europe. By Wilbert E. Moore. Geneva: League of Nations, 1945. Distributed by Columbia University Press, New York. Pp. 299. $3.00.

Within the compass of a short review justice cannot be done to this excellent and informative study of the economic-demographic problems of those parts of Europe where the pressure of numbers upon resources is relatively intense. Much of this study was completed before the formal termination of World War II; hence it does not take into account the political and economic changes which have since taken place. Notwithstanding, the basic economic and demographic facts remain substantially what they were; this study has lost little of its timeliness, therefore.

The areas treated are areas of comparatively high rates of population growth, while their economies are essentially agricultural and nonindustrial in character. In these areas Malthusianism is not without significance. Moreover, the methods of analysis and the findings of this study have significance for that large fraction of the world which is agricultural, overpopuiated, and ridden with disguised unemployment.

Following his description in chapter I of the actual and prospective demographic situation of Europe, Professor Moore presents in chapter II for the countries of Europe (and in part for their subdivisions) data on agricultural production, fishing, and forestry per hectare and per person dependent upon agriculture. In general, these production indexes fall (much as the indexes of human fertility rise) as one moves from the North Sea into Europe in easterly and southerly directions. Appendixes I and II deserve more careful study and

appraisal than is possible in this review. For here the author explains how he has estimated net agricultural production, how he has converted heterogeneous national production figures into terms of a kind of common denominator "crop unit" for purposes of making international comparisons, and how he has converted agricultural land of divergent fertility into terms of essentially comparable "arable equivalent" values.

In chapter III estimates of "surplus" agricultural population are given for the countries (and their subdivisions) of southern and eastern Europe. These surpluses are arrived at by subtracting from the actual agricultural population the population that would be required in agriculture if farming were conducted as efficiently as in selected parts of Europe. Agricultural overpopulation is found in much of southern and eastern Europe, its magnitude depending upon the standard of efficiency chosen.

The circumstances under which agriculture is carried on in these parts of Europe are considered in some detail, and many of the reasons for agricultural inefficiency and for its persistence in these parts are indicated. The land tenure and agricultural labor systems of these areas are outlined in Appendix III. Professor Moore's analysis discloses the influence that somewhat noneconomic cultural factors may exercise upon agricultural and industrial development.

What may be done to relieve population pressure in eastern and southern Europe? Emigration if appropriately selective in character can provide some relief; while the prospective decline in fertility, should it prove greater than forecast, will prevent a too great accentuation of prevailing difficulties. Measures which place primary emphasis upon agricultural production cannot bring about a marked improvement in the levels of production and consumption. Of most importance as a means of relief is industrialization, for it can provide employment for the population surplus now in agriculture, stimulate agricultural production, and generate a new way of life that will bring reproduction under control. Industrialization as such constitutes an inadequate solution, Professor Moore shows. It is in the modernization and rationalization of economic and social life that a solution must be sought . . . in industrialization, urbanization, and secularization. In the last two chapters circumstances favorable and unfavorable to industrialization, urbanization, and modernization in these parts of Europe are considered. In Appendix IV some statistical materials on industrialization and resources are presented by country. A useful bibliography and an index are included.

Duke University JOSEPH J. SPENGLER

Russian-American Trade. By Mikhail V. Condoide. Columbus, Ohio: Bureau of Business Research, Ohio State University, 1946. Pp. xiv, 160.

The coverage of Professor Condoide's book is somewhat broader than the title implies, since only two chapters and the Appendix are concerned with Russian-American trade. Chapters 1, 3, and 4 discuss the history, organization, and nature of Russian trade in general, and chapter 2 even summarizes briefly the organizational characteristics of the Russian economic system.

With the general conclusions of the book there can hardly be argument: Soviet imports and exports are governed by the decisions of the Communist Party rather than by a pricing mechanism; the U.S.S.R. exports in order to import; the geographical direction of Soviet trade depends to an important extent upon political considerations; the nature of Russian trade in the near future will depend primarily upon the choice which the Kremlin makes between standards of living and "reconstruction"; except during the lease-lend period trade with the Soviets has been a very small percentage of the United States total; and the frequently heard prediction that Russia will soon be a great international trading competitor of the United States and Great Britain is based upon the grossest of misconceptions. There is the probability, however, that readers largely ignorant of Russian history since 1917 will be misled by several passages in the book and will come away with a mistaken notion concerning the nature of Soviet general policy. For instance, on page 27 Professor Condoide states that "the problem was one of determining which commodities could be exported without appreciably affecting the health or economy of the nation, and which ones would be purchased by foreign buyers," and eight pages later he discusses the heavy food exports of 1930–34 without mentioning the widespread starvation which characterized part of that period. Again, on pages 52–53 he speaks of the success of the Torgsin stores and the valuta campaign without informing the reader that these were partly G.P.U. as well as partly commercial undertakings. And, on pages 31–32, he discusses Russia's 1931 attempt to have trade discrimination against particular countries outlawed without pointing out the farcical nature of a Soviet pledge not to enact discriminatory trade laws. This last omission is apparently the result of Professor Condoide's assuming here a more sophisticated reader than the one to whom most of the passages are addressed, since in the following chapter the types of control which the Soviets exercise over foreign trade are examined fairly thoroughly.

Both the Preface and internal evidence suggest that the book was completed before the end of World War II.

University of North Carolina HENRY OLIVER

Changes in Income Distribution during the Great Depression. By Horst Mendershausen. New York: National Bureau of Economic Research, 1946. Pp. xviii, 173. $2.50.

This work offers an analysis of changes in family income between the years 1929 and 1933 in 33 cities of the United States. The raw data were taken from the *Financial Survey of Urban Housing*, a CWA project sponsored by the Department of Commerce. The cities range in size from Cleveland, Ohio, to Boise Idaho, and the city samples usually contain 10 per cent or more of the total population. The raw data were edited carefully and it seems clear that the unrejected returns are reasonably accurate and sufficiently reliable.

A basic distinction is made throughout the study between tenant families and owner families, and statistical coefficients are computed for these categories separately as well as for both together in each city.

The two main statistical measures of inequality employed are the coefficient of variability (ratio of standard deviation of incomes to mean income) and the coefficient of concentration. The latter term is defined as the arithmetic mean of all the differences in income (considered positive) divided by twice the arithmetic mean of all incomes. The mean difference obviously will be zero in the case of perfect equality, or zero concentration. At the other extreme, where all the income would be received by one person, the value of the mean difference is given by $(N - 1)N\overline{X}$ divided by $N(N - 1)/2$, or $2\overline{X}$, where $\overline{X}$ is the mean income. Dividing this mean difference by twice the arithmetic mean gives a coefficient of 100 per cent, viz., complete concentration. The coefficient of concentration may also be thought of as the ratio of the area between a Lorenz curve of income distribution and the diagonal of equality to the area of the right triangle formed by the diagonal and the margins of the Lorenz chart.

The main conclusion of the study is that inequality increases during a depression and that on the average inequality increases among tenant incomes twice as much as among owner incomes. Professor J. Marschak in a preface to this work gives a hypothetical example wherein the inequality in Table 6 might be due to a random redistribution of incomes and not to the fall in general prosperity. This seems rather a pointless comment in the light of the fact that we *know* in the given instance the redistribution was *not* random, but was due to changes in business conditions which affected whole classes in different degree. The increases in the coefficients of concentration are not due to increases in the mean differences (for they actually decreased) but to the even greater declines in mean incomes resulting from the depression.

In about two-thirds of the cities the Lorenz curve for 1933 crosses up and over the 1929 curve at a point above 80 per cent or more of the income recipients. The lower half of the income receivers is hit hard by unemployment and that bends the curve outward at the bottom, but the most wealthy are also hit hard by business losses and that bends the curve inward at the top.

Coefficients of correlation between incomes in 1929 and 1933 show that the greater the rate of income decline the greater the instability of income position.

University of Florida MONTGOMERY D. ANDERSON

California Business Cycles. By Frank L. Kidner. Berkeley and Los Angeles, California: University of California Press, 1946. Pp. xiv, 131. $2.50.

Analyses of business cycles usually are made along national lines. This study is designed to analyze cyclical fluctuations on a regional basis. The broader scope of a national study "precludes the possibility of shedding light upon the effects of alternative lines of public policy except so far as the behavior of the smaller unit may be conceived to be patterned after or determined by that of the larger unit" (p. 3). The author sets out to ascertain "the relation of the structural characteristics of an economy . . . to the nature of the cyclical fluctuations to which it is subject" (pp. 1, 3). The work is an effort to explain the character of cyclical fluctuations by reference to a smaller than national economy.

The book is divided into five chapters, three (chapters II, III, IV) of which are

replete with statistical material. Chapter I presents the "reasons for associating a study of regional development with a study of cyclical fluctuations . . ." (p.8). Chapter II "is an analysis of the development of the California economy . . . as compared with the United States" (p.8). Chapter III "consists of a study of the comparative stability of the California economy using the economy of the United States as a bench mark" (p.8). Chapter IV reveals the characteristics of the California cycle in comparison to the cyclical activity of the nation. Chapter V is a summary of the study with conclusions.

It is shown that California is largely a manufacturer of consumer goods that are marketed locally. The author points out that due to the relatively smaller degree of industrial specialization and the close connection between California manufactures and agricultural and basic resources and due to the presence of a local market, it might seem that California would show greater cyclical stability than the United States as a whole (p. 35). Such is not necessarily the case. From 1919 to 1937, the years of the Great Depression show the greatest similarity in manufacturing activity between the United States and California; the middle twenties the greatest differences; and the years 1919 to 1921 occupy an intermediate position (p. 57). The general conclusion is that the cyclical behavior of California closely resembles that of the United States (p. 106).

It is of significance that the greatest differences in behavior between California and the United States appear in the expansion phase rather than in the contraction phase of the cycle. The explanation of this is that entrepreneurial anticipations, when superimposed upon an economy undergoing a rapid secular growth, will stimulate a more rapid recovery (California) than when superimposed on an economy undergoing a less rapid development (United States). The similarity in the contraction phase may be due to the fact that when entrepreneurs become pessimistic no significant investment is undertaken anywhere (pp. 114–117).

The work is well documented, but in places the style of presentation clouds the interpretation. The numerous charts are not always clearly depicted. At times one has the feeling that the work does not contribute greatly to an understanding of the business cycle; e.g., the author, after due consideration reaches the fairly obvious conclusion that ". . . there might be greater differences between the cyclical fluctuations occurring in two (related) economies . . . when the cyclical movement in the larger economy is a minor one. . . . In a major cycle . . . the effect of national policy . . . may be sufficiently powerful . . . to impose a high degree of similarity on the cyclical behavior of the whole country" (pp. 113).

As a study of California economic conditions and as evidence of the role of secular development in shaping the course of investment, and thereby cyclical behavior, the book makes a contribution.

Washington and Lee University E. C. Griffith

Consumer Economic Problems. 3rd edition. By H. G. Shields and W. Harmon Wilson. Cincinnati: Southwestern Publishing Co., 1945. Pp. viii, 760. $1.88.

This book is an attempt to answer, partially, the question, What should high

school students study in place of impractical and uninteresting subjects such as Latin, ancient history, and geometry? Dissatisfaction with the old curriculum of the secondary school, dominated as it was and still is to a considerable extent by college entrance requirements, has compelled changes. "Practical" courses, such as manual training, home economics, and industrial arts, have come in. Technical high schools have multiplied. Even the literary or traditional college entrance curriculum has not survived intact. The old requirement of ancient language has given way to the new requirement or permission of modern language. Less mathematics than a generation ago is required now for graduation and for entrance into college. The social sciences have not been immune. Instead of three or four years of history with a dash of civics, we now find an assortment of courses, including such offerings as economics, sociology, modern social problems, problems of democracy, and consumer problems. This trend is doubtless desirable but our hopes should not be raised too high. New courses are not going to save the world. While it may be better on the whole for high school seniors to study consumer economic problems than to go over American history for the fourth time, yet we must remind ourselves that they are more interested in smooching and football than in either history or consumer problems. The fundamental difficulty in trying to teach 17-year-olds economics is the woeful lack of acquaintance with the practical side of our economy and inexperience in even elementary business procedure on the part of the youngsters and too often on the part of the teacher as well.

The volume under review makes an earnest effort to interest and enlighten the student on his personal financial and consumer problems. Photographs, drawings, and diagrams are liberally sprinkled through the 43 chapters grouped into nine parts. The authors attempt to cover a wide range of topics, including the functions and channels of marketing (in 16 pages); the law of contracts; aids and pitfalls for the consumer; how to buy packaged goods, perishable foods, clothing, fabrics, shoes, household appliances, automobiles, furniture, floor coverings, drugs, cosmetics, and soap; buying on short-term credit and on the installment plan; budgeting and keeping records; insurance protection and how to buy life insurance; whether to rent or to buy a home and how to finance a home if bought; and some shotgun treatment of banks, money, credit, taxes, income, wealth, and conservation of resources. If high school youngsters (and the book is written primarily for that group) survive this barrage, they should realize at least that they are living in a complex society.

The authors adopt a highly laudatory attitude toward advertising, stating flatly that "it pays" as proved "by the successful selling of advertised products and by the fortunes that have been built as the result of good advertising programs" (p. 156). No mention is made of offsetting losses and wastes, although later in the chapter attention is directed to dishonest and misleading advertising. Brokers are erroneously said to buy and sell goods (p. 32). Hedging is incorrectly explained as forward buying (p. 40). Such mistakes are, however, not typical. Most of the material is clearly and effectively presented and is correct factually. Excellent questions and problems accompany each chapter. If the

teacher has majored in economics or business administration in college, he should be able by careful selection of topics to make a worth-while course based on this text.

Woman's College of the University of North Carolina ALBERT S. KEISTER

Beyond Supply and Demand. By John S. Gambs. New York: The Columbia University Press, 1946. Pp. 105. $1.60.

This book undertakes a reexamination of Veblen's contribution to economic theory. Dr. Gambs observes that the implications of Veblen's work and its relevance to our day are often overlooked. Because disagreement among economists is probably greater today than at any time since the eighteenth century there is greater need for taking stock of the state of economic theory than ever before, and Dr. Gambs's book helps meet this need.

One of Veblen's distinctive contributions was the bringing of information, concepts, and methods of the other social disciplines into economics. "Institutional" economists, continues the author, regard aggression and coercion as basic features of commercial society. From this premise come their denial of the existence of any automatic mechanism which assures general economic stability and efficient organization of production, their emphasis upon the disorders and contradictions of the economy, their insistence upon the coercive use of money, their emphasis upon the study of social institutions and the special advantages these confer upon special groups, their distinction between the industrial and pecuniary aspects of economic behavior, and their "evolutionary" approach, with its regard for the fact of social change and theory of change. Veblen involved his analysis in contradictions when he undertook to introduce a new conception of human nature into economics. He followed James and Dewey in recognizing the plasticity of human material and in showing how social institutions mold economic attitudes and action. But he also believed that instincts operated in the background as determinants of economic behavior. Dr. Gambs goes to considerable lengths to point out parallel lines of development between Veblen's and Freud's use of instincts because he believes this holds promise of achieving a scientific foundation for social therapy. Institutional economists seek to identify those dominant influences and interests around which modern civilization is oriented; these are seen to be "coercive-pecuniary-mechanical" in character. Yet it is Marxian to represent dominant cultural patterns as exercising a molding influence upon behavior. Veblen considered his practice of stressing the importance of social change and of accounting for major social change as a consequence of scientific and technological innovations as significant features of his own work. Dr. Gambs characterizes this theory of change as Hegelian dialectics. Veblen's unconscious utopian bias weakened his theory, and he erred in thinking that technology would cause workers and engineers to lose faith in commercial mores in advance of the rest of the population.

The most serious shortcoming of the followers of Veblen has been their failure to develop an integrated theory. After Veblen's mistakes are removed there remain valuable formulations upon which to build, of which the most

interesting to Dr. Gambs seems to be the theory of aggression and coercion because of its susceptibility to psychoanalytic treatment. In spite of their relative disesteem for traditional theory, institutional economists have fallen back upon it more often than they have usually realized because of their failure to develop a reliable theory of their own.

Notwithstanding Dr. Gambs's interest in the concept of coercion, it is erroneous to set it up as a major premise from which flow such things as the distinction between industry and social institutions, the emphasis on social change, and criticism of the traditional theory of economic order. In doing this he confuses basic elements of theory and makes the starting point for economics different from that of other social disciplines. Veblen undertook to place economics upon the same foundation as the rest and thus made the study of culture the starting point of economic inquiry. From there the analysis proceeds to the exploration of the different aspects of culture, including the manipulative and coercive uses of social control devices. Veblen drew upon the philosopher's analysis of the doctrine of natural order to attack the traditional premise of economic order. The book is written in generally moderate tones, but the tone becomes shrill when the author criticizes the "behavioristic" idea that cultural patterns play a deciding role in shaping the general aspects of group behavior. This view has been confirmed and recognized by social investigators and is no longer taken as a denial of the contributions of psychoanalysis, as would have been the case in the not too distant past. The judgment that Veblen's theory of change is Hegelian fails to distinguish between pre-Darwinian and the modern theory of change. These dubious criticisms are likely to add to the general confusion in theory and seem most regrettable.

It is possible to conclude on a theme of more accord. Dr. Gambs feels that the future probably lies with some alternative to traditional theory. The latter has failed on two major counts: it has failed to provide the tools of analysis for understanding the economic crises of modern society, and it has proved incapable of assimilating the methods, concepts, and information which have revolutionized other social disciplines in the twentieth century. The extraordinary responsiveness of economists to the Keynesian challenge is some indication of how generally and acutely these deficiencies have been felt; theoretical reconstruction is now well under way. Yet the theory of the future must also accord in the long run with the findings of the other social studies, and this is likely to have as great an effect in transforming theory as the more immediate and spectacular events of the past decade. If this view of the matter is correct, then Veblen's theoretical structure will probably have a growing attraction for economists in the period ahead.

University of Kansas City J. R. Hodges
Kansas City, Missouri

Financing Business During the Transition. By Charles C. Abbott. New York: McGraw-Hill Book Co., 1946. Pp. xii, 141. $1.75.

This book is a publication of the Committee for Economic Development,

whose present research program is "focused on the attaining and maintaining of high production and employment." This study, as the title indicates, is concerned with problems of the transition period and deals with an aspect of the general problem of maintaining high employment which is vital if we are to assume a continuation of a more or less free economy. The purpose of the book, as set forth by the author, is twofold: "to examine the financial position and financial problems of industry during the transition from war to peace" and "to direct attention to the part that public policy can play in solving financial problems of private business during the transition period" (p. 1). The author ably coordinates these two general purposes without losing sight of the fundamental problem of maintaining a high level of employment and production.

The financial structure of American business underwent major changes during the war. While there was an expansion of total business assets, the expansion was by no means even, either with respect to the distribution of assets among various industries or with respect to the type of assets being added by specific industries. Thus, while net current assets of American business expanded by about 17 billion dollars between 1939 and 1943, there was a net shrinkage in the book value of fixed assets of approximately 2.5 to 4.5 billion dollars. Not only was there an over-all shrinkage of fixed assets, but while some war industries experienced tremendous expansion of fixed assets, other industries were left with decidedly smaller amounts of such assets than they had had at the start of the war. The dissimilar behavior of fixed and net current assets upset drastically the prewar size relationship between them. Further, there was a very great shrinkage in the over-all size of the financial structure relative to the national income and to gross volume of business.

It is against this general background of events that Professor Abbott examines the problem of financing business during the transition. His approach is to examine the demands for financing, the supply of short-term credit, and the supply of long-term funds, at the same time recommending policies to be followed by the government for stimulating the flow of funds to industry.

No definite conclusion is reached with respect to the magnitude of the demand for new funds. However, in view of the over-all shrinkage of fixed assets and reduction of total assets relative to volume of business, the author is of the opinion that business will have to bring in substantial volumes of new funds, a point of view which conflicts with some other studies cited and seems to be justified by the increased volume of corporate issues for new money in recent months. The analysis of the demand for new funds is of more significance in pointing out the myriad and diverse factors having a bearing upon the demand for funds than in estimating the amount of new funds needed and serves to emphasize the pitfalls of crystal gazing in so far as this particular area of business is concerned.

The discussion of the supply of short-term credit, while including briefly the institutional sources of such funds and their capacities to expand credit, is concerned primarily with the problem of freeing the flow of such funds to that part of business which, unfortunately, both needs these funds most and is least able to get them. The author proposes a wider use of "known and accepted financial

devices," such as the term loan, and a revision of bank examination standards more in line with the present-day position of commercial banks; but rejects proposals for government guaranty of loans to small business "unless it is unequivocally clear that commercial banks cannot or will not take steps to meet small business's credit needs" (p. 91). With the latter conclusion, many will disagree. But the author supports his position ably.

On the problem of providing long-term financing, Professor Abbott concludes that "the volume of liquid assets available for investment [in long-term securities] in the transition period . . . will be adequate and conceivably more than adequate for the over-all needs of business" (p. 97); however, "a sufficiency of investment funds in an over-all sense does not necessarily mean that there has been, or that in the postwar period there will be supplies of money adequate to satisfy each type of business need" (p. 101). This condition arises from such factors as a need for a greater volume of equity funds than may well be available; the inability of small and medium-size firms to tap the supply of long-term funds; and the too rigid legal requirements for institutional investors. Public policy aimed at alleviating these conditions is suggested, including a recommendation that the SEC be given discretionary power to exempt from registration issues ranging up to $500,000, to which specific recommendation this reviewer objects. A further simplified form of registration statement is no doubt desirable for the small corporation. But giving the commission even the discretionary power suggested would take away from the public gains it was all too long in obtaining.

Finally, a question should at least be raised concerning Professor Abbott's recommendations looking to the lowering of standards for bank loans and of legal requirements for investments by fiduciaries. The recommendations are not sufficiently definite to appraise. Yet it should be urged that any move in that general direction be made with extreme care. Perhaps some ideal balance between social needs for credit and the individual's need for safety of his own funds may be attained. But the means for reaching this balance has not as yet been clearly indicated.

University of Florida JOHN B. MCFERRIN

Going Into Business for Yourself. By O. Fred Rost. New York: McGraw-Hill Book Co., 1945. Pp. 334. $3.00.

> The basic object of . . . all . . . chapters in this book is to facilitate, and as far as seems wise to encourage, individuals to go into business. But that encouragement can extend only so far as each individual determines at the outset to go into business with his eyes and ears and mind wide open and with the firm resolve that available information and recorded knowledge on the subject will be studied and digested as far as possible before the final step is taken. . . .

A search through this book, which is intended to do so much, reveals that it contains little factual information that will keep open the mind of the newcomer in business or will help him to understand adequately the business world he plans to enter. Furthermore there is no attempt to tell the reader of the sources

of knowledge available to him and exactly how and where he can obtain them. And finally this book includes information which is so incorrectly or inadequately presented that false concepts may easily be created in the mind of the unwary reader.

Experienced businessmen today are gravely concerned, if not scared stiff, over some of the major problems confronting our economy and their businesses. The possible decline of prices of merchandise and raw materials, the increase in the number and intensity of barriers to trade, the difficulties in buying merchandise, the increased competition of chains, the monopolistic practices of some large businesses, the constant threat from the large amounts of idle funds which are so quickly attracted to any new and profitable kind of business, the increase in consumer credit with the demands for additional financing to carry more accounts receivable, the increased costs of operating businesses which result from compliance with government regulation, and the persistence of the boom-and-bust economics in America are but a few of the causes of headaches and stomach ulcers among businessmen. *Going Into Business for Yourself* so blithely ignores these problems that one wonders whether the omission is due to ignorance of the business world or to a reluctance to disclose what may appear to be unsocial aspects of American business or what are the real causes of the high mortality rate among small businesses.

The newcomer is lectured on the need of becoming informed; but, with the exception of a few casual references to the Committee for Economic Development, the United States Department of Commerce, and the usual trite advice to see your lawyer and talk it over with your banker, the book contains no specific suggestions. Even the addresses of the two agencies mentioned are omitted. Surely the least that could be done would be to include a bibliography of approved business directories and reference books, standard texts, business magazines, trade papers, and a list of government and private agencies that can help the newcomer.

False concepts come from statistics carelessly presented. The amounts of typical *net* annual sales for each of the 24 businesses discussed in Part IV are based on surveys of a very limited number of firms, never representing even 1 per cent of all businesses of the type in the country. Dun and Bradstreet, the inadequately acknowledged source, are careful in their report, *Standard Ratios for Retailing*, to state the number of firms surveyed. This book, on the other hand, omits the number in each case and leaves faulty impressions with the casual reader. For example: The $15,000 typical *net* annual sales for cigar stores and cigar stands as reported by Rost are based on 43 concerns surveyed in 1939. Actually there were 16,886 independent cigar stores and stands in business during that year and their annual sales *averaged $8,900.* The sales of the 1533 chain stores reporting averaged $36,000. So many newcomers in business have inflated ideas about their potential sales volume and profit margins that the greatest of care should be taken in presenting statistics on these phases of any business.

Going Into for Business Yourself contains most of the sermons and platitudes

used by so many credit managers of large wholesale companies when lecturing the neophyte on how to be a nice little businessman, one who will never cause Mr. Credit Manager any trouble—but who likewise will never build another Sears, Roebuck, A&P, or United Fruit Company. The book could benefit a great deal by more discussion of how to promote sales, increase volume, attract customers—in brief, how to make a business grow and succeed.

Washington, D. C. D'ALTON B. MYERS

Principles of Business Organization. By William R. Spriegel and Ernest Coulter Davis. New York: Prentice-Hall, 1946. Pp. 564. $6.35.

This book is written with an operating business as the central theme. Emphasis is on individual responsibility and the organization that will realize the individual and group objectives. The arrangement of the book into 9 parts and 34 chapters is exceptionally good.

It is difficult to do justice to the scope of this study in a review. Useful chapters are found on the functions of business enterprise. Ownership and structural forms of a business enterprise, promotion and operation, financial considerations, accounts and records, personnel, business research and forecasting, management, leadership in business, and governmental controls are described in a thorough and clear manner.

American students who have longed for the day when our government would "promote the general welfare" as set forth in the preamble to the Constitution will applaud the following statement, which is found on page 513:

> To protect the public interest, some governmental regulation is undoubtedly necessary. Such regulation should cover the owners, their operations, workers, and users, all to the end of providing adequate and uninterrupted service to the public. Neither management nor labor should be permitted, as a matter of public policy and protection, to hold up the public service while they fight out private battles. This means that mechanisms should be established by the government to protect the workers from exploitation by the owners and also to protect the owners from exploitation by the workers. The basis of such controls should be the public welfare, which demands continuous operation of public utilities.

It is regrettable that the authors in writing this worth-while book did not consult more up-to-date material. We are told (p. 133) that the purchase price for newly mined silver is 64.64¢ an ounce. In these days of rapid changes in legislation, it is possible for changes to take place that make certain parts out of date in a hurry; but in the case of the price of newly mined silver, the price of 64.64¢ an ounce has not been in effect since the price was raised to 71.11¢ an ounce on July 5, 1939. The recent increase (July 31, 1946) in the price to 90.5¢ an ounce has come since the publication of the book.

J. P. Morgan and Company is used as an example of an investment banker (p. 141). As a result of the Banking Act of 1933 which separated investment banking from deposit banking, J. P. Morgan and Company gave up their invesment banking business. Morgan, Stanley and Company now carry on the in-

vestment banking functions of J. P. Morgan and Company. Morgan, Stanley and Company began business on September 16, 1935.

The old reserves of the member banks of the Federal Reserve System of 13, 10, and 7 per cent on demand deposits and 3 per cent on time deposits (p. 143) are given. This was corrected in a footnote. It would seem more in keeping with a 1946 book to state the present reserves and leave the old reserves for the footnote. The old reserves have not been in effect since August 15, 1936.

The authors state (p. 147) that the "Federal Reserve Banks are required to keep a reserve of 35 per cent against deposits of member banks." But we are correctly told (p. 134) that a law of June 12, 1945, reduced the reserves to 25 per cent. It is unfortunate that this statement couldn't carry over from page 134 to page 147. Credit expansion (p. 148) is based upon the old reserves of 13, 10, and 7 per cent, which have not been in effect since August 15, 1936.

Figure 12 (p. 179) is a check but is labeled a bank draft, while Figure 14a (p. 181) is a bank draft but is labeled a bank check. It is a slight but misleading error.

In speaking of severe depressions, the authors refer (p. 479) to 1920 and to 1932–33. Most economists would not limit them to those short periods. It would be more nearly correct to say 1920–22 and 1930–40.

The statement is made (p. 135) that "we may be considered to be on a gold standard for international trade." A gold bullion standard externally may be more descriptive of reality.

In spite of errors it is a good book and should be well received in its field. It is an important contribution to the literature of business organization and will be a welcome addition to the textbooks in that field.

University of Florida MURRAY W. SHIELDS

Georgia Facts in Figures, A Source Book. By The Citizen's Factfinding Movement of Georgia. Athens, Georgia: The University of Georgia Press, 1946. Pp. xviii, 179. $2.00.

Georgia Facts in Figures is exactly what its title suggests—a compilation of recent statistics of the state of Georgia. Virtually all recent statistics pertaining to Georgia have been accumulated from federal sources such as the Bureau of the Census, Bureau of Labor Statistics, Social Security Board, Bureau of Agricultural Economics, Interstate Commerce Commission, and from state sources such as the Georgia state auditor.

The 226 tables, charts, and maps provide data on the following subjects: natural resources, human resources, man-made resources, agriculture, industry and commerce, health, education, public welfare, government and politics, public finance, and religious groups. One interesting feature of the statistics given is that a Georgia total figure is followed by Georgia's percentage of the corresponding United States total. This facilitates comparison of Georgia with the nation as a whole.

This volume provides a store of information about Georgia never before brought together in a single volume. It should prove useful to existing business and agricultural enterprises, to those contemplating locating in the South, as well as to such groups as chambers of commerce.

A glossary and a thorough index complete the volume. The tables, though compact, are easily read, and the statistics are comparatively up to date.

Alabama Polytechnic Institute HAROLD EMERSON KLONTZ

Principles of Accounting Intermediate. 3rd edition. By H. A. Finney. New York: Prentice-Hall, 1946. Pp. xii, 873. $5.00.

The third edition represents the first revision of the book since 1934 and during this period of time many refinements have taken place in accounting. Mr. Finney has taken cognizance of many of the current changes and the present volume has been expanded to include a much more elaborate and better discussion of accounting theory. Two full chapters have been added dealing with basic accounting theory and many of the debatable points in connection with the realization of profits, profits and savings, cost basis of accounting, etc., are discussed. The inclusion of these two chapters improves the book to a very large extent.

The former edition devoted two chapters to actuarial science and most instructors in using the book as a text omitted those chapters, possibly because the subject matter was too difficult to teach. In the present edition these chapters have been combined into one chapter. Chapters in the earlier edition dealing with consignments and installment sales have also been omitted from the current edition, while additional space has been given to inventories in connection with a more complete discussion in regard to the meaning and application of cost.

The chapters on partnerships have been moved to this volume. Cash has been allotted a complete chapter while notes and accounts receivable have been combined. Additional space has been given to fixed assets, primarily in connection with depreciation. This is in accordance with the statement made above that more emphasis is placed upon accounting theory in the present edition than in the preceding one.

The problems given in the two editions appear to be about the same although it is probable that some improvement can be noted in the new edition. Professor Norman B. Clark of Woodbury College prepared several short problems for each chapter.

The author still appears to have the best book in the field for certain teaching purposes. In my opinion these purposes are either the use of the book in the C. P. A. review course or in some previous course. It is believed that all students preparing to take the C. P. A. examination should either study this book (with the accompanying volume labeled *Advanced*) on a formal course or use it as a review preparatory to that portion of the C. P. A. examination dealing with accounting practice.

Duke University MARTIN L. BLACK, JR.

Introduction to Social Science: A Survey of Social Problems. Abridged one-volume edition. By George C. Attebury, John L. Auble and Elgin F. Hunt. New York: Macmillan Co., 1946. Pp. 787. $4.00.

To evaluate a text designed to introduce students to the fields of the social sciences, one must decide which is the better method for presentation: selected problems more or less intensively studied, or a general survey of the basic principles and methods common to the social sciences. So far, to my knowledge, no one book has shown adequately the interdependence of political, economic and social institutions in their historical setting. The usual approach is to organize the material around one of the traditional and separate disciplines and bring in the other fields. The end result is an introduction to a social science.

The one-volume edition of *Introduction to Social Science* is a condensation of the two-volume work of the same name, published in 1941. The authors, fifteen teachers of the survey course required of all freshmen in the junior colleges of the city of Chicago, believe that the student should be presented "a realistic view of our total social scene with emphasis on the common elements which bind the social sciences together." Selected "concrete problems" are analyzed and "the relevant interests of the different social sciences are brought to bear upon the subject."

The goal set by the authors is an admirable one and implies integration in the fullest sense of the word. But, if the book is to be used as a "one semester's" course, as the statement in the preface indicates, the student will have only a smattering of information on many subjects and little understanding of the basic factors responsible for these problems. Would not a more thorough treatment of fewer problems give better insight into the nature of modern social life, and in addition, serve to illustrated the common elements?

There are 25 chapters, each dealing with a separate problem arranged in parts centering around the three disciplines—sociology, economics and political science. In the desire to streamline the material broad generalizations are necessarily made. No summary chapter appears either at the end of the parts or of the book as a whole. For example, in Part II, the problems of the consumer, agriculture, standards of living and economic insecurity are among the questions discussed. The relationship is implied between work and wages, labor organization, standards of living and economic insecurity but it is not highlighted sufficiently to show the common principles operating through each one of the questions. The last chapter, "Democracy and Dictatorship," would have served as a useful summary chapter but instead discusses the fundamental concepts of democracy and the various forms of dictatorship. So that at no time are the specific problems fused into an integrated whole. Undoubtedly, this lack of unity arises, in part, from the fact that six different authors wrote the separate chapters.

Too little consideration is given to the historical framework in which each problem arose. History is one of the most important and useful of the social sciences and is an excellent basis on which to integrate materials in the various fields.

The criticisms voiced above are faults arising from the obvious difficulties involved in writing a text to fit the needs of those who teach an integrated course in social science. It is doubtful that any one text will meet the problem satisfactorily. The subject matter of the social science is the world in which we live. Each discipline is constantly changing as it adjusts to new developments in the changing world. Measured in the light of these difficulties inherent in the subject matter, *Introduction to Social Science* is at the top of those books written for students beginning their study in the social sciences. The book has been improved by its condensation into one volume. The abridged edition should be used for a year's course rather than one semester. It is well written in a style planned to catch and hold the interest of the reader. The charts, pictographs and tables add to its value. The teaching aids at the end of each chapter—terms to be understood, questions for discussion and supplemental readings—are a decided asset. It will continue to find the same general favor, as did the two-volume work, for use in senior high schools and junior colleges.

Hollins College OREEN M. RUEDI

An Introduction to Modern Economics. By Valdemar Carlson. Philadelphia: Blakiston Co., 1946. Pp. xvii, 337. $3.50.

The appearance of a new "Introduction to Economics" raises the perennial question of what should be the aims of an elementary course in the field and what is the most satisfactory approach for the student. Professor Carlson states that he is primarily concerned with "building up a theoretical understanding of economics which will be valid in dealing with problems of public policy" in a democratic framework and that "a student must see the outline of the whole economic system before he can apply himself intelligently to specific problems." The author's approach to his subject emphasizes the problem of maintenance of full employment under conditions of modern technology and views the economic system mainly from that angle.

The reviewer is in full sympathy with Professor Carlson's view that in a democracy economics should serve the citizen by providing him with guidance for action on public policy. One may agree also that a general understanding of the whole economic order may conceivaby be achieved by thorough analysis of such a major problem as the full utilization of productive capacity.

Many sections of the book are stimulating and thought provoking. For instance, Professor Carlson's analysis of the "political economy" of the modern corporation in which he has made admirable use of such investigations as those of the T.N.E.C. should serve the useful end of disabusing the student's mind of "no longer relevant beliefs about private enterprise."

In spite of the virtues of some of its parts the impact of the book as a whole is disappointing. To mention just a minor criticism—even in a day when typographical errors are all too common—one is annoyed by the large number of slips, such as the frequent use of affect instead of effect and lack of agreement between subject and predicate. One "terminological inexactitude" on page 229,

where the Committee for Industrial Organization is called the Committee of Industrial Organizations, is misleading as to the facts. This may be considered a minor matter, but it has some importance if one considers that the student of economics must have training in the precise use of language. One wonders whether pressure of time may have been responsible for minor errors and whether that also may have some bearing on the fact that the treatment of the subject as a whole seems suggestive rather than systematic. It is both reasonable and courageous to depart from "the conventional approach" if that does not serve the author's purpose, but such departure involves additional responsibility for making clear the logic of his own view.

Sweet Briar College GLADYS BOONE

STATE REPORTS

ALABAMA

In general, industrial production was maintained at high levels during the summer and early fall of 1946 although the index of industrial activity calculated by the Bureau of Business Research of the University of Alabama indicated a moderate decline from the wartime peaks. Construction was active with a large proportion of the contracts in the residential field. Retail sales continued high and demand for all kinds of commodities was extremely active.

Petroleum prospecting and production continued to attract attention in the state. Frequent reports of drilling in various parts of the state appeared in the press. Several companies were reported to be interested in oil rights in tidelands in the vicinity of Mobile and indications of natural gas were found in Walker and Winston Counties. Production, however, was confined to the Gilbertown area and the production for the first eight months of the year was reported by the state geologist as 258,762 barrels. A refinery located in Tuscaloosa began operations in October. The main product is to be asphalt, with gasoline and other petroleum products as byproducts.

The wet and cool spring and early summer had a bad effect on cotton, the state's chief money crop, and despite some improvement later in the season, the estimated production for 1946 as of October 1 was 780,000 bales as compared with 931,000 bales in 1945. The short crop centers the hope for increased farm income for the present and immediate future upon the continuance of high cotton prices.

Labor disputes, employee elections, and strikes continued through the summer and fall of 1946 to occupy a prominent place in Alabama business activities. The nation-wide strike of maritime workers paralyzed Mobile port activities. Then throughout the state there were numerous local strikes such as those that occurred at the Ingalls Iron Works, Birmingham Tank Company, the textile plants at Andalusia, Attalla Pipe and Foundry Company, Gadsden Iron Works, bus companies in Huntsville, Gadsden, Anniston, and Fairfield, Kahn Manufacturing Company, and taxicab drivers in Mobile. A case of some interest involved the right of coal miners employed by the Tennessee Coal, Iron, and Railroad Company to unemployment benefits during the shutdown caused by the steel strike. Frank Broadway, director of the State Department of Revenue, ruled that they were not entitled to such benefits under a provision of the Alabama law which forbids payment to a worker for idleness caused by labor disputes in his working establishment. The case was carried to an appeal board which reversed the director's decision.

The summer has been marked by a high level of activity in the state's basic industries and by the announcements of new plants and expansion programs for established concerns. The iron and steel industry has been operating at full capacity and has had the problem of allocating its product since orders greatly exceeded the quantities produced. As a result, there has been some dissatis-

faction among processors and manufacturers who failed to obtain all the steel they desired. Among the expansion programs are those of the Virginia Bridge Company and the conversion and expansion of Tennessee Coal, Iron, and Railroad Company facilities at Fairfield, Alabama, to produce cold reduced sheets. Late in August it was announced that the Bobbi Car Corporation would establish a factory in Birmingham. Steady progress has been reported in leasing sections of the Betchel-McCone plant in Birmingham and the Coosa River Ordnance Plant at Talladega to industrial tenants. Many small industrial establishments have been making their appearance.

In the iron industry there was widespread dissatisfaction in August with a Civilian Production Administration order channeling pig iron to the production of soil pipe, pressure pipe, and other specified products on the ground that it discriminated against many foundry concerns. An interesting development was disclosed by an announcement in October that the blast furnace which was built in Gadsden by the Defense Plant Corporation was to be operated by the Republic Steel Corporation to produce pig iron for use in housing with a bonus of $12 per ton.

There has been a very pronounced tendency for industry generally to take a very gloomy view of the prospects of the Alabama coal mining industry. The fact that Alabama coal seams are narrow and broken or pinched by faults and folds and that the coal must be washed makes it costly to mine in terms of man-days of labor. This is held to place Alabama operators at an increasing disadvantage as wages are increased.

University of Alabama H. H. CHAPMAN

FLORIDA

The recent analysis of state income payments by the Department of Commerce shows that Florida's proportion of the national income increased from .8 per cent in 1929 to more than 1.5 per cent in 1945. The percentage increase of Florida's share of the nation's income from 1929 to 1940 was greater than that of any other state. From 1940 to 1944 Florida's portion grew at a more rapid rate than that of all but three other states. From 1944 to 1945 the rate of growth of Florida's income flagged slightly; even so, only five states enjoyed a faster growth. In 1929 Florida had a smaller percentage of the national income than seven of the eleven southeastern states. By 1945 only two of these states, North Carolina and Virginia, received a larger share of the national income than Florida.

Every year from 1929 through 1940 Florida had a higher per capita income than any other southeastern state. In 1941 and 1942 Virginia's per capita income exceeded that of Florida, but in 1943 this state regained and has held the lead. Florida's $996 per capita income for 1945, while less than the national average of $1,150, is much larger than that of any other southern or southwestern state.

Business activity for the first seven months of 1946 was up 23 per cent over the corresponding period in 1945. Bank debits for 1946 were above those for

1945 by the following percentages: St. Petersburg, 45; Miami, 39; Orlando, 35; Tampa, 12; Jacksonville, 11; and Pensacola, 9. Florida's retail sales were 31 per cent over those in 1945. The national increase was 26 per cent.

During the fiscal year 1945–1946 total federal tax collections in this state equalled 394 million dollars, a rise of 2.5 per cent over last year, compared with a 3 per cent decline in national collections.

The 1945–46 fruit and vegetable crop had a gross value of 364 million dollars, the highest in history. For four consecutive years the record of all preceding years has been broken. The estimated net profit to growers on the 1945–46 gross is $163,951,853. Another "biggest tourist season" is under way, with thousands of outside visitors already present. The real estate boom continues. It is conservatively estimated that realty values are at least 100 per cent above prewar levels. The future agricultural picture is described as "uncertain," but citrus growers are expecting another banner year and very few truck farmers and cattle-raisers are anticipating bankruptcy.

The darkest spot in the economic scene is a recent rapid growth of unemployment. More than 65,000 are now jobless compared with approximately 58,000 in July. The number is not considered alarming, however; the state's unemployment insurance fund has adequate reserves and intensified activity in citrus and the rapid influx of tourists from November through February are expected to absorb the unemployed.

Employers and employees in Florida's closed shop industries are generally not obeying the anticlosed shop amendment to the state's constitution pending further judicial action on the question.

The Interstate Commerce Commission has not yet acted upon the recommendation of its examiner that control of the Florida East Coast Railway be placed under the duPonts instead of the Atlantic Coast Line.

Despite tremendous gains in the state's economic wealth, many public services, which were substandard before the war, have rapidly deteriorated. A recent authoritative study found that Florida ranked 27th among the states in ability to maintain its schools and 45th in the quality of education dispensed to its children. The Rockefeller Foundation discovered hookworm, filth, and unfit conditions in many schools of one of the state's wealthiest counties. Almost every public health survey reveals high rates of morbidity; care of the mentally infirm, both adults and children, lags badly; many local jails compare unfavorably with the dungeons of the Inquisition; other public buildings, with some exceptions, are dilapidated; the beautiful University of Florida campus is now botched by hideous temporary structures to accommodate an enormously expanded enrollment; streets, sewer systems, water plants, lighting facilities, parks, and other local government services of the larger cities are in disrepair. There is a critical need for long-range planning at federal, state, and local levels to meet and solve these problems. Governor Millard Caldwell has thrown the whole weight of his administration into a program of public improvement. Much is being accomplished. But the opposition is strong, and Florida's chief executive has such closely restricted powers that he cannot pursue a

vigorous policy without considerable compromise with his cabinet, which is elective, is largely independent of the governor, and can if it chooses vote down his program.

University of Florida WILLIAM H. JOUBERT

GEORGIA

The Cason J. Callaway plan for Georgia agriculture, the principal features of which were summarized in the *Southern Economic Journal* for October 1944, is now roughly two years old. The purpose of the plan, it will be recalled, was to demonstrate the practicality of soil improvement programs for the South. One hundred locally owned and financed small farm corporations were created in 68 different counties scattered over the state, to show that the soil can be improved rather than be allowed to deteriorate while the farm is earning a reasonable return on investment and labor. The results to date are encouraging. Although five of the corporations have not yet begun operations, the originator of the plan states that 80 of them are "doing a grand job," while the other 15 are "doing an ordinary job." It is too early to draw any final conclusions. Four out of five, however, seem to be demonstrating the feasibility of Mr. Callaway's contentions. If generally accepted and applied, this can become a fact of basic importance to southern agriculture. The movement, while continuing its land building program, plans now to direct its attention to the other three planks of its platform: the means of making available long-term commercial credit, practical methods of mechanization, and the obtaining of processing plants near the farm for the utilization of various crops.

Revenue collections by the state of Georgia were $76,918,485 for the fiscal year ending June 30, 1946. They were the highest in the state's history and compare with $59,485,025 for the preceding year and $58,057,911 for the year ending June 30, 1944. Practically every class of revenue except the general property tax and one or two minor items showed an increase over last year. Principal sources of gain were liquor taxes, which were $7,304,635 above those of 1945, motor fuel tax, which increased $6,020,622, and cigar and cigarette taxes, up $2,461,838 as compared with the previous year. Each of these reflects the increase in consumer expenditures and the increase in the supply of these products available for civilian use following the end of the war.

The motor fuel tax continued to be the chief revenue producer. It yielded $27,284,991, or 35 per cent of the total, to which users of motor vehicles added a further $2,575,432 in payment of motor vehicle license fees. The income tax provided $15,182,916, to remain the second most important source of revenue although closely pushed for this position by the levies on alcoholic beverages, including beer and wine, from which the state obtained $15,122,842. Cigar and cigarette taxes brought in $7,584,980, while the general property tax, once the most important source of income for the state, now stands fifth as a revenue producer. Collections from this source were $5,375,843, as compared with $5,482,675 in 1945 and $5,384,582 in 1944. Although Georgia has no general sales tax, the ascendancy of taxes based on sales in the state's revenue system is

shown by the fact that this class of taxes produced almost two-thirds (65.8 per cent) of the total revenue collected during the fiscal year. In addition, practically all the 32.5 per cent increase in revenue since 1944 was accounted for by taxes in this category.

Particularly important at this time when postwar plans involving large expenditures by both state and local government in Georgia are being formulated is a historical study of state government finances recently made by Dean R. P. Brooks of the University of Georgia (*Financing Government in Georgia, 1850–1944*). The following paragraphs make no attempt at critical analysis, merely summarizing certain features of the study believed to be of interest to southern economists.

Divided into four parts, the study traces the cost of government in Georgia from 1850 to 1944 and the corresponding development of sources of revenue to meet increasing government costs, analyzes Georgia's present capacity to pay taxes, and evaluates the burden of those taxes which rest most directly upon business.

The central theme of the study is an analysis of the present revenue system of Georgia. Each principal source of revenue is critically examined. Specific recommendations are then made for equalizing the tax burden and increasing the state's revenue to enable it to meet more adequately the increasing demands of its citizens for the services of government. How important this will be is indicated by a statement issued by State Auditor B. E. Thrasher, Jr., that if Governor-designate Eugene Talmadge carries out his pledges on state education he faces a possible state budget deficit of over $15,000,000.

State revenue in Georgia during 1944 was obtained from four principal sources: sales taxes, 55.4 per cent; income taxes, 26.7 per cent; property taxes, 8.9 per cent; license taxes, 7.4 per cent. Although sales taxes provided 55.4 per cent of the Georgia treasury receipts for 1944, there is no general sales tax. Instead, specific excises are levied on nine groups of items, of which the taxes on motor fuel, alcoholic beverages, and cigars and cigarettes are by far the most productive. In his discussion of the gasoline tax, Dr. Brooks strongly supports the provision of Georgia's new constitution which prohibits the allocation of taxes for specific purposes, arguing that "no other tax in Georgia is so generally diffused as is the gasoline tax," and that it would be socially undesirable to use all of the funds from the tax for highway purposes to the neglect of such important state functions as education, health, and social welfare. Dean Brooks' recommendations with reference to sales taxes are that Georgia establish a state monopoly of the liquor business, and impose a general 2 per cent sales tax.

Georgia's second most important source of revenue, the income tax, has been seriously impaired in recent years due to the provision of the law permitting the deduction of the federal income tax in calculating the state tax. Dr. Brooks therefore suggests that this deduction be discontinued, and also that the corporation income tax rate be reduced from 5½ per cent to 4 per cent to bring it into line with that of the other southeastern states.

Historically the property tax is Georgia's most important levy and is the one

that occasions most difficulty in administration. There has been since 1920 a remarkable stability in the digest, in the amount collected, and in the millage rate. The percentage of total taxes collected from property, however, has declined from 46 to 8 (6.9 per cent in 1946). Dr. Brooks' recommendations include major changes in the administration of the tax so as to set up a larger measure of state control of assessments and review, strengthening of the intangibles law, and reducing the homestead exemption from $2,000 to $1,250.

Dr. Brooks finds Georgia's system of license taxes "arbitrary, unscientific, and unfair." He would, accordingly, replace the present small business and professional taxes "by some type of single coordinated business tax designed to treat all types of small business fairly."

Dean Brooks also advocates an inheritance tax on the North Carolina model and a change in the corporation franchise tax from our present graduated rate with a maximum tax of $5,000 to a flat rate of $2 per $1,000 of issued capital stock, or, as an alternative, 15 cents per $100 as in Tennessee. It is estimated that all the changes suggested would increase the state revenue over that of 1944 by not less than 50 per cent.

In line with his recommendations for increasing the state's revenue are Dr. Brooks' conclusions as to the capacity of the people of Georgia to pay taxes. After comparing Georgia with the other southeastern states on a number of bases, including population, assessed values, manufacturing, income, and tax loads, he concludes that "Georgia is not by any means as heavily taxed a state in proportion to ability to pay as any of its southern neighbors."

Emory University ALBERT GRIFFIN

KENTUCKY

Government control of production of burley tobacco for another three years was approved by over 62,000 Kentucky growers. Less than 1000 cast their votes for discontinuance of the system of penalites imposed on growers who market tobacco above their allotments.

The survey of the state's school system previously mentioned in these notes is not likely to get down to the level of the common school districts where 153,000 children are not enrolled in any school, and where 73,000 of those enrolled do not attend. The trouble does not seem to lie in the people's efforts for approximately 62 cents out of every general fund dollar goes to education. The state has certainly made great strides in the last few years. The total state appropriation for education at all levels has risen from $12,694,000 in the 1939–40 fiscal year to $24,538,000 in 1946–47. Creation of a minimum school term of eight months and of a permissive maximum local school tax rate of $1.50 were two long strides in the school improvement program. One more hurdle to be cleared is the constitutional provision apportioning the state's per capita fund according to the number of children in the school district. Nothing is said about enrollment in school, or attendance if enrolled. Mere physical presence of a child under 18 years of age is sufficient to secure the $24.40 (1946–47) allotment. No wonder school authorities are lax in checking attendance!

Kentuckians might well ponder a recent news item which showed their state to rank eighth in the amount of jobless pay disbursed by the federal government to war veterans on the basis of $20 a week for a maximum of 52 weeks. Is this high rank, all out of proportion to its population, due to the unwillingness of its veterans to work, to the lack of economic opportunity, or to the exceedingly heavy enlistments in the armed services of its young men before the draft became effective? It is undoubtedly true that a heavy proportion of the state's servicemen were from small towns or farm areas where $20 a week is considered good pay. Why work when so much can be had for loafing?

The Court of Appeals has delivered two opinions on tax matters that are of more than passing importance. The first has to do with Louisville's attempts to assess for property tax purposes income-yielding holdings of charitable and religious institutions. Last spring the court reviewed the history of such cases and examined the Constitutional Debates of 1890–91 to see what the framers meant by the word institution. It virtually admitted that the word meant the physical property used in furtherance of the institution's purposes—the correct interpretation in the opinion of competent tax authorities and one that would have solved the problem had it been made the basis of the decision—but the court refused to overthrow its long line of decisions holding all property of such institutions to be exempt. The recent case concerned a 99-year lease on land granted by a charity for the erection of commercial buildings, the buildings to become the property of the charity at the expiration of the lease. The court, ignoring the main issue, decided this case in favor of the municipality, holding the buildings to be taxable by breaking with the long tradition "that anything attached to land is an unalterable part of the land." "The owner of the dirt beneath an imbedded fixture placed there does not necessarily own the fixture itself."

The other case set aside an inheritance tax levy on the remainder interest in irrevocable trust funds. The precise effect of this holding is not yet clear but it appears to alter the time at which the tax levy becomes effective by postponing payment for a generation. If such is the effect the decision is one more argument for gift taxation.

University of Kentucky RODMAN SULLIVAN

LOUISIANA

The general appropriations bill includes the total sum of $100,050,030.82 for 1946–47 and $100,493,056.82 for 1947–48 for general operations.

* * * * *

More than 30 acts dealing with education were adopted at the last session. Included is one creating a special education committee composed of members of the House and Senate to make a complete survey of the educational system of the state. Under another act an appropriation of more than 3 million dollars was made to the Louisiana State Board of Education for the purpose of raising the pay of teachers of the public schools whose pay is less than $3600 per year.

A classified civil service system was established for municipal fire and police service in cities of not less than 13,000 or more than 250,000 population. A firemen's pension and relief fund was established for the city of Monroe and the general Police Department Pension and Relief Fund Act, applicable to cities of not less than 50,000 or more than 250,000 was amended.

* * * * *

The sum of $900,000 for each of the next two years was appropriated out of the Special Gasoline Fund for distribution to the parishes which have adopted the "unit system" for the expenditure of funds in constructing and maintaining public roads within the parishes.

The department of highways received an appropriation of $150,000 for the purpose of making a traffic survey and a physical finding survey to determine the proper location of a bridge over, or a tunnel under, the Mississippi River at New Orleans.

* * * * *

The 1946 session amended the Teacher's Retirement System Act, created a retirement fund, and established a Louisiana State Employees Retirement System, to which it appropriated $725,000.

In addition, municipalities having a population in excess of 90,000 were authorized to establish pension and retirement systems for all their appointive officers and employees.

* * * * *

The following statutes relative to veterans were adopted at the last legislative session:

One statute provides for state aid to children of members of the armed forces of the United States who died during or as a result of service in World War II, giving free tuition in state colleges, plus the sum of $300 per year to such children between the ages of 16 and 21.

Another appropriates $500,000 to the state board of education for Veterans' housing units at state colleges.

Another appropriates $37,500 annually to the state board of education for the purpose of providing a program of on-the-job training and education for veterans of World War II.

The act establishing the Department of Veterans' Affairs by a previous legislature was completely amended and reenacted.

Ex-servicemen are relieved of the disability of minority for the purpose of authorizing them to execute all legal instruments required under the provisions of the Servicemen's Readjustment Act of 1944.

The Income Tax Act was amended to give veterans an additional exemption of $1500, if single, and $2500 if married, for the years December 31, 1945, to December 31, 1950, inclusive.

Authorization for the admission of affidavits to Louisiana courts of deeds, conveyances, and similar legal instruments, executed by persons serving in the

armed forces of the United States before commissioned officers in the armed forces was made.

Under another statute provided for the reinstatement of veterans in state jobs.

* * * * *

In spite of losses in business activity shown by many series during September as compared to August, Louisiana business forthe January–September period was much above the same period last year. Twenty-one of the 27 series carried in the *Lousiana Business Review* were ahead of last year. Only a few series showed losses.

Unemployment benefit checks were 991.4 per cent higher than last year. Freight carloadings were down 16.5 per cent, postal receipts, 15.7 per cent, and manufacturing sales, 12.5 per cent. Except for two other series, which had losses less than 10 per cent, all other series were ahead of last year.

The largest gain was shown in building permits which were up 176 per cent over last year. Other lines of business which showed large increases were life insurance sales (56 per cent), furniture sales (55.5 per cent), wholesale hardware sales (45.3 per cent), retail hardware sales (43.4 per cent), and men's clothing sales (43.1 per cent). Seventeen series showed gains of 15 per cent or more.

For the United States as a whole, department store sales were 30 per cent ahead of last year for the January-September period. This figure is slightly ahead of the 27.7 per cent for Louisiana. Sales of ordinary life insurance in the United States were 62 per cent above this period last year, while for Louisiana they were 56 per cent above last year. Louisiana bank debits were 19.7 per cent ahead of last year compared to 8 per cent for the nation.

* * * * *

The largest recorded fur take in the history of Louisiana was the 1945–1946 fur crop, according to the annual report submitted by Armand P. Daspit, director of the Fur and Refuge Division, to Luther S. Montgomery, director of the Wildlife and Fisheries Department.

The report covers the period from July 1, 1945, to June 30 of this year. The crop included 8,337,411 muskrats, 168,598 mink, 244,502 raccoons, 90,433 opossums, 12,224 skunks, 2367 otters, 3823 foxes, 8784 nutrias, and 1467 miscellaneous pelts.

The furs trapped last season brought to the trappers a revenue of approximately $15,553,185, according to the report, and this amount would have been far higher had not OPA prices been in effect on muskrat and a number of other pelts.

In addition to the fur crops of the past, Mr. Daspit pointed out, a new fur, that of the nutrias or coypu, is now being produced commercially in Louisiana. The nutrias were the result of the importation of six pairs of the fur bearers to Avery Island six or eight years ago by E. A. McIllhenny.

"Nutria," the report said, "seems to thrive well in our marshes and should in the next ten years exceed in value the muskrat take. The nutria uses that

part of the marshes uninhabited by the muskrat. The nutria is a larger, much stronger and more rugged fur-bearing animal."

The nutria, it was explained, thrives on the coarser grasses and vegetation in the marshes and does not encroach upon the food supply of the muskrats.

Louisiana State University KARL D. REYER

MISSISSIPPI

Business activity has continued at a brisk pace throughout the year. This is reflected in the tax collections of the State Tax Commission. Sales tax receipts, a constant business indicator in Mississippi, have been consistently above collections for 1945, and for the 10-month period January–October have averaged 25 per cent higher. The timber severance tax, which provides a good index for a major Mississippi industry, has likewise been running considerably ahead of last year and for the same 10-month period has averaged approximately 35 per cent higher. The oil severance tax, with the exception of March, increased each month from January through September. With the exception of February, it produced substantially the same as it did last year, or more, the excess of 1946 over 1945 receipts having increased each month to 80 per cent in October. For the first 10 months of the year, they were over 25 per cent higher than the same period in 1945. Total taxes collected by the State Tax Commission were up approximately 17 per cent for the same period.

The index for business activity seasonally adjusted and on a 1939–1940 base has hovered about 245. The highest point reached by this index last year was slightly over 220. Although most of the major indicators continued above last year, there were some variations. Contracts awarded, which were up from last year during the first six months of this year, dropped in July to 23 per cent under last July and in August were 13 per cent under August 1945. The August total of $2,306,000 was smaller than for any previous month in 1946. Nevertheless, the eight months' total was almost double the total for the comparable period in 1945. Cash farm income for the first seven months of the year was only $112,000,000 as compared to $114,000,000 last year, and indications point to a short cotton crop this year.

Employment, which reached its worst state in the early part of the year, has been steadily improving since. Job applications with the United States Employment Service offices in Mississippi totaled over 19,000 in January. These have tended to fall each month and in August totaled only a little over 10,000. Compared with job applications in the similar months of last year, 1946 has shown many more applications but a steadily improving situation throughout the months since February. February applications were 400 per cent of the previous February; June applications were only 77 per cent greater than in the previous June; and August applications were 20 per cent less than in the preceding August.

Accompanying the decline in job applications has been an increase in non-agricultural job placements which rose steadily each month from 3,400 in February to 6,000 in August; and although with the one exception of June the

placements have been fewer than in 1945, the percentage differential has rather steadily decreased from 64 in January to only 26 in August. Unemployment claims have likewise been steadily dropping from approximately 40,000 in January to 22,000 in August. It is true that compensable claims in August were still 200 per cent greater than in August of last year, but the excess over last year has been steadily declining. For March the comparable figure was 1,600 per cent. Thus it would seem that the employment problem is definitely improving.

University of Mississippi ROBERT B. HIGHSAW

NORTH CAROLINA

Full crops, the highest tobacco prices on record, a reasonably favorable situation for cotton, and the government support program to provide price insurance for a still undetermined period of the future combine to give North Carolina farmers a generally cheery outlook. In North Carolina, to an even greater extent than in many states, farm prosperity spells general economic well-being.

Much of the structure of prospective farm prosperity is, however, built around the government price support program. The prices established have, in most cases, been quite favorable to farmers. After the expiration of this program, what?

Before the question can be considered, a clear idea of the facts of the government price program must be obtained. After the imposition of price ceilings, the establishment of price floors was demanded. In the original wartime agricultural price support legislation, passed in May 1941, Congress directed the Commodity Credit Corporation to make loans on "basic crops," including corn, wheat, cotton, tobacco, rice, and peanuts for nuts, at 85 per cent of parity. Two months later, by the Steagall Amendment, the Secretary of Agriculture was directed to make loans at *not less than* 85 per cent of parity on any commodity the expansion of production of which he considered necessary for war purposes. On all other agricultural commodities, the Secretary was empowered to set a loan rate at any level necessary to bring prices and incomes to producers of these commodities into line with prices and incomes of producers of the basic and Steagall commodities. Minimum loan rates have since been raised to 90 per cent of parity, and, in the case of cotton, to 92½ per cent. The support prices actually set by the Secretary have often been far above the minimum. Loans will be made on the basic crops "...harvested ... before the expiration of the two-year period beginning with the first of January immediately following..." the date upon which the President or Congress declares the war officially over. Steagall commodities will be supported for a similar period except that the word "harvested" was omitted from the stipulated period.

North Carolina farmers (in common with American farmers in general) are producing in their accustomed manner, with little regard for long-time considerations. In cases where the support price has been especially favorable, large surpluses of some commodities have already appeared: for example,

Irish potatoes in North Carolina in 1946. If farm prices decline, this situation can be expected to recur with increasing frequency.

Few persons expect farm prices to be held for long at present levels. O. C. Stine, assistant chief of the Bureau of Agricultural Economics, stated at the recent Outlook Conference in Washington that the combined result of higher cost and lower prices might well mean a reduction of 15 per cent in the net income of farm operators in 1947, as compared with 1946. And in 1947, price supports will still be operative. Removal of the supports may mean a further precipitate drop in the income of farmers. Furthermore, continuing increased production in response to these supported prices will probably be somewhat out of line with demand at freely determined prices.

As one means of minimizing the difficulty of the inevitable readjustments, and to hold production within reasonable bounds, production allotments are being considered, and have already been announced for 1947 on at least one commodity, Irish potatoes, in North Carolina.

Agricultural price support legislation was passed in the belief that farmers, who were being asked to organize production for war, needed assurance that good farm prices would prevail in the immediate postwar period to enable them to reconvert without suffering serious losses. This reasoning is beyond reproach. The question is, will farmers reconvert as long as prices supported at a high level make it immediately profitable for them not to do so?

It seems clear that the power to vary the level of supported prices should be actively used to redirect production into peacetime channels, exactly as it was used so effectively to direct it into the pipelines of war. Unless such a course is followed, curtailment of production of some commodities will be necessary, by farmers voluntarily, by an allotment system, or by other means, to avoid the possibility of an entirely different type of post-support readjustment. Remembering the resistance encountered by the Commodity Credit Corporation a few years ago when it attempted to sell cotton to counteract sharply rising prices, one cannot put aside the thought that there may be resistance to permitting price supports to lapse at all if the lapse would bring about too severe or too sudden a dislocation.

Always and everywhere a vitally important economic factor, agricultural prices in the months ahead will bear especially careful study. In a state like North Carolina, where the whole economy is unusually closely integrated with the agricultural economy, such study is of extraordinary importance.

North Carolina State College FRANCIS E. MCVAY

SOUTH CAROLINA

The shift from production for war to production for peace is being made rapidly in South Carolina. There were 271,000 people employed in industries covered by the South Carolina Security Commission in June 1946 as compared with 258,000 six months earlier. Employment by industries in June was as follows: manufacturing, 183,000; wholesale and retail trade, 45,000; service industries, 14,000; contract construction, 13,000; transportation, communications,

and utilities, 12,000; finance, insurance, and real estate, 4,000; and mines, 1,000. Returns per person employed were highest in finance, insurance, and real estate and second highest in transportation, communications, and utilities.

Total employment in industry in the state continued to increase in late summer and early fall, and unemployment compensation benefit payments were 15 per cent less in September than in August but were still 4.5 times as large as in September 1945. However, total unemployment benefit payments in September paid by the South Carolina Unemployment Compensation Commission amounted to only $131,000, or was less than contributions to the unemployment benefit fund. Funds available for benefit payments totalled $42,692,000 at the end of September or were $444,000 larger than a month earlier. Payments of servicemen's readjustment allowances also declined from August to September. However, 19,000 servicemen received $1,652,000 in unemployment allowances during September and the decline from August to September was largely the result of veterans' entering school. Veterans' self-employment allowances also declined. The number receiving self-employment claims decreased from 10,110 in August to 5,263 in September and the amount paid decreased from $989,000 to $508,000 during the same period. Much of this decline was attributed to the fact that most of the self-employed veterans are engaged in agriculture; because of the sale of farm products fewer could qualify to receive allowances.

The per capita income in South Carolina was more than twice as large in 1945 as in 1929, according to the Department of Commerce. Income payments per capita were $663 in 1945 as compared with $261 in 1939, $147 in 1932, and $252 in 1929. The state, however, continues to rank near the bottom in per capita income and gains relative to the national average are made slowly.

Since the population has increased, total income payments have shown an even greater increase than per capita income. Total income payments in South Carolina amounted to $1,265,000,000 in 1945 as compared with $493,000,000 in 1939, $261,000,000 in 1932, and $438,000,000 in 1929. Wages and salaries accounted for 61.7 per cent of total income payments in 1945. Proprietors' income accounted for 19.5 per cent, property income 5.8 per cent, and other income 13 per cent. In 1929 wages and salaries accounted for 60.7 per cent of total income payments, proprietors' income 30.1 per cent, property income 8.0 per cent, and others 1.2 per cent. Wages and salaries, then, continue to maintain their relative position.

Real estate prices continue to rise in South Carolina. The price of farm real estate in July was 111 per cent above the 1935–39 average and was 73 per cent above the 1912–14 average. The Bureau of Agricultural Economics index of the price of farm real estate rose from 98 in 1916 to a high of 230 January 1, 1920, and then declined to 126 two years later. There was a slight increase from 1922 to 1925 but after 1925 the price of farm real estate decreased constantly until the 1930–33 depression when it broke sharply and reached a low of 57. The price rose gradually from 1934 to the outbreak of war and has increased rapidly since then. Although the current price is well below the peak reached in 1920, the percentage increase over the period immediately before World War II has been

about as great as that for the similar period for World War I. Should the general level of prices received by farmers break as it did following World War I, the price of farm real estate is expected to break sharply.

Total crop production in South Carolina for 1946 is slightly larger than in 1945 and well above the 10-year average (1935–44). Cotton is the only important crop for which indicated production is not well above average; the 1946 production of cotton, however, is slightly above that of 1945. Due to higher per acre yields, production of grain is slightly larger than last year and well above the 10-year average. Production of hay, although smaller than in 1945, is also well above average. The acreage in flue-cured tobacco was increased and above average per acre yields have been harvested, resulting in a record production. Because of above average yields per acre, the production of Irish potatoes was also well above that of a year earlier and the 10-year average, and the production of sweet potatoes was about the same as in 1945 and well above average. Pecan production is slightly smaller than a year ago and the 10-year average.

Farm Credit Administration GLENN R. SMITH
Columbia, S. C.

TENNESSEE

Tennessee continues to attract new industries and is experiencing a substantial expansion of its existing firms. For the first eight months of 1946, the Industrial Development Division of the Tennessee State Planning Commission estimated that $64,000,000 had been spent or committed by 205 concerns for new plants or the expansion of existing firms. This figure is some $14,000,000 more than was spent by 227 concerns during the entire year of 1945.

DuPont has announced the breaking of ground for a $20,000,000 plant in the Chattanooga area and during October the American Enka Corporation began work on a new plant near Morristown. Many of the new concerns are locating in smaller communities and the result will be a better distributed income throughout the state. An analysis of the new concerns locating in Tennessee reveals that they represent a wide diverisfication of products.

The U. S. Department of Agriculture reports that farmers of Tennessee received cash receipts from farm marketings of some $336,863,000 in 1945. This figure exceeds that for 1944 by 3 per cent and is approximately five times that for 1932.

The reconversion of industry to peacetime production in Tennessee was accomplished with a minimum of lay-offs. The peak of unemployment since 1938 was reached in March 1946 and each month thereafter employment has climbed. By October 1946 some areas of the state reported more people employed than during the peaks of the wartime years. This is illustrated by the report of a study of the U. S. Employment Service for the Hamilton County and the Chattanooga area. It was found that employment in this area for October 1946 had reached a total of 77,250 as compared to the wartime peak of 75,875 reported for May 1945. Industrial employment for the entire state had climbed to some 235,000 by June 1946 and it is believed that this increase has continued through-

out the year. It is estimated that some 19,500 additional jobs will be provided by the expansions and new plants already announced.

The Department of Employment Security in Nashville has completed a study of the employment experience of returning veterans. They report that only 10,482, or 3.06 per cent of Tennessee veterans who were out of service at the end of August 1946, had drawn unemployment benefits for 20 weeks or longer. Of these, 1478, or about one in seven, were disabled but registered as able and available for suitable work. The remaining 96.4 per cent of the 283,521 veterans in Tennessee reported out of service during the period studied had either gone to work, returned to school, or were drawing allowances for fewer than 20 weeks.

Tennessee's finances reflect the continuing prosperity of its citizens. The Department of Finance and Taxation reports total collected revenue, for the first six months of 1946, of $64,151,068, an increase of $12,417,056 over collections for the same period of 1945, or 24 per cent. Gasoline taxes account for $6,846,133 of this increase. Other taxes accounting for substantial amounts of this increase are tobacco, $2,271,758; motor vehicle, $936,498; alcoholic beverage, $830,662; privilege, $456,840; and gasoline inspection, $435,152.

The last Department of Finance and Taxation monthly report available is that of October 1946. This report shows collections of $5,180,120 compared with revenues of $4,198,889 for the same month of 1945, or an increase of $981,231. The heaviest month's collections of gasoline taxes in the history of the department were reported as $3,212,370, compared with $3,096,030 for October 1945. Tobacco tax collections amounted to $655,854, or an increase of 7.46 per cent over those for October 1945. Other large tax collections include beer, $109,174; alcoholic beverage, $290,505; privilege, $207,025; inheritance, $151,268; and motor vehicle, $179,673.

The tourist season of 1946 brought many persons to Tennessee. A tabulation released in November 1946 indicates the Great Smoky Mountains National Park led in the number of visitors among all national parks. Visitors to the Great Smoky Mountains National Park totaled 1,147,377. This may be compared with the 1,247,019 visitors during the last prewar season of 1941.

University of Tennessee T. LEVRON HOWARD

VIRGINIA

Business conditions in Virginia continue at high tide, though some stresses are beginning to appear. The slump in manufacturing after VJ Day had turned into an upswing by June 1946. There was a steady month-to-month increase in employment during 1945 with the exception of the month of May when the curtailment of electric power in the state caused a decrease in employment. The over-all picture in employment in manufacturing industries since the third quarter of 1939 shows an increase of 21 per cent. There are no present indications that employment in manufacturing will level off but that in all probability it will continue gradually to rise further for some time. Many manufacturing companies have recently made plans for expansion in Virginia. One of the largest is a new sulfuric acid plant of du Pont at an estimated cost of a million and a half

dollars. Several plants, closed for various causes, have reopened. Certain silk manufacturing companies, closed since 1941, are now in operation because of increased allotments of silk by the government. Tobacco manufacturing has greatly expanded. The annual production of cigarettes rose from 61.5 billions in 1939 to 109.4 billions in 1944. Virginia's production of the total for the United States rose from 10.8 per cent in 1939 to 35.2 in 1944.

During the war 142 plants costing over 300 million dollars were put into operation in the state. Because of the existence of community facilities, these plants tended to be concentrated in areas already largely industrialized. If Virginia is to invite industries into rural areas, there should be plans for well-designed and adequate facilities for community living. Looking to the future, considerable benefit should result from investigations of the Bureau of Population and Industrial Research dealing with the need for synchronizing plans for the development of community facilities with any steps to industrialize rural areas of the state.

* * * * *

Virginia farmers had another good year despite the handicaps of labor shortage, scarcity of machinery, and cool weather. Increased yields are indicated for tobacco, wheat, oats, peanuts, potatoes, cotton, and apples. The corn yield was below that of 1945, but still excellent. There was a decrease of about 15 per cent in income from poultry due largely to the raising of less poultry. Livestock production was about the same as the preceding year but the total income was larger due to price increases. Partly because of increased farm operating expenses, total net income of Virginia farmers was slightly below the 291 billion dollars of 1945. Farm wages, at three times the prewar level, were the highest in the history of the state. Farm land values were up 88 per cent above 1939, and 12 per cent above the 1920 peak. Oil crops such as soybeans and peanuts responded sharply to price rises. The tobacco markets in the state brought high average prices for all grades. Total income from tobacco sales was approximately 15 per cent higher than the 62 million dollars received for the 1945 crop, with the flue-cured tobacco farmers in the most favored position.

* * * * *

The Commonwealth ended the fiscal year on June 30, 1946, with a net invested surplus of 21 million dollars, making a gross invested surplus of 53 million dollars. For the first time total revenues exceeded 200 million dollars and total expenditures amounted to over 183 million dollars. The General Fund, a good barometer of the state's financial position, increased from 44 million dollars in 1945 to 47 million dollars in 1946. Out of this fund expenditures for salaries, education, health, and public welfare are made. Profits from the sale of alcoholic beverages represented one of the largest single items of revenue. The treasury received 16.8 million dollars from investments. Thirty million dollars of the total gross surplus was appropriated by the General Assembly in the form of "conditional appropriations." It is expected that during the next two years this amount will be spent among 248 items, including additions and betterments at

state institutions. During the year the state made two significant fiscal changes. The gasoline tax was increased from five to six cents a gallon. This tax has produced more than 314 million dollars of revenue since its inauguration in 1923. In 1941, the peak year, motorists paid into the Virginia treasury 25 million dollars in gasoline taxes. Moreover, on July 2, about sixteen thousand state employees received pay increases ranging up to 43.6 per cent for the lowest paid personnel. Virginia at the close of the fiscal period was in a strong financial condition.

University of Richmond HERMAN P. THOMAS.

PERSONNEL NOTES

Clarence H. Anderson has joined the teaching staff of the School of Business Administration at Emory University.

A. Bruce Anthony is now head of the Department of Economics and Business Administration at Mercer University.

Roscoe Arant has jointed the staff of the School of Business Administration at Emory University.

L. J. Arrington, assistant professor of economics at North Carolina State College, is on leave to complete work for his doctorate.

C. E. Aultz, formerly at De Paul University, has been appointed associate professor of industrial management at the University of Tennessee.

Mary Noel Barron has joined the Department of Economics and Commerce of the University of Chattanooga.

Rue L. Beale, assistant professor of economics at Murray Kentucky Teachers College, has resigned to remain with the Louisville OPA.

Oscar D. Beverly, formerly at Arizona State College, has been appointed assistant professor of accounting in the College of Business Administration, University of Georgia.

H. A. Black, formerly a lieutenant in the Navy, has been appointed teaching assistant in accounting in the College of Business Administration, University of Georgia.

Julian R. Black has been appointed instructor in accounting at Duke University.

Mary Evelyn Blagg has left the University of Kentucky Bureau of Business Research staff to accept a position at the University of Mississippi Bureau of Public Administration.

Edward Brennan, recently released by the Army, has been appointed instructor in accounting in the School of Commerce and Business Administration, University of Alabama.

L. P. Brookens has begun his duties as associate professor of economics at North Carolina State College. He was formerly with the Census Bureau, U. S. Department of Commerce.

C. R. Burgess has been added to the staff of the Department of Economics and Commerce, University of Louisville.

Frank A. Burtner, assistant professor of economics at Clemson Agricultural College, has been granted leave of absence to continue graduate work.

N. G. Butcher is instructor in the Department of Economics and Business Administration at Mercer University.

John E. Champion, who was recently released by the Army, has been appointed teaching assistant in the College of Business Administration, University of Georgia.

John W. Chisholm, formerly of the University of Alabama, is now instructor in economics in the College of Commerce of Louisiana State University.

Thomas A. Clark has been appointed teaching assistant in economics in the College of Business Administration, University of Georgia.

T. Hillard Cox has been appointed professor of management in the College of Commerce at Louisiana State University. He has recently been associated with the U. S. Department of Commerce and the War Manpower Commission.

John R. Craf has been added to the staff of the Department of Economics and Commerce, University of Louisville.

Mervyn Crobaugh has resigned from Washington and Lee University to continue his work with the OPA.

Maude Cuenod, formerly at West Texas State College, is instructor in business administration in the College of Commerce, Lousiana State University.

John E. Dean, who served as a lieutenant in the Coast Guard during the war, has been appointed instructor in economics, College of Business Administration, University of Georgia.

Robert G. DeuPree has been appointed associate professor of marketing at the University of Tennessee. He recently served as head of the Drugs, Soaps and Cosmetics Price Section of OPA in Washington, and was formerly associate professor of economics at Baylor University.

Merrill DeVoe, who has been associated with Ohio State University, has been appointed associate professor of marketing at the University of Kentucky.

Ruby Edens has been appointed assistant professor of business administration and secretarial science at Tusculum College.

Herman A. Ellis has been appointed assistant professor of economics at the University of Kentucky.

George W. Fair has been appointed instructor in accounting in the College of Commerce, Louisiana State University.

Herbert L. Findley has been appointed professor of business law and head of the Department of Business Law in the School of Commerce and Business Administration, University of Alabama. He resigned his judgeship to accept this appointment.

Rudolph Freund, who was formerly at the University of Virginia, has been appointed associate professor of agricultural economics at North Carolina State College.

Bruce Futhey has returned as associate professor of accounting in the School of Commerce and Business Administration, University of Alabama. He has been practicing for the last three years in the employ of Haskins and Sells.

Roy L. Garis resigned his position at Vanderbilt University to accept an appointment as head of the Department of Economics at the University of Southern California.

J. Solon Gentry has become a member of the Department of Business Education at East Tennessee State College.

B. M. Gordon has been added to the staff of the Department of Economics and Commerce, University of Louisville.

James Griffin has joined the staff of the School of Business Administration at Emory University.

E. C. Griffith, formerly of the University of Georgia, has become associate professor of economics at Washington and Lee University.

Charles A. Hales, who was formerly at Colorado State College of Education, has been appointed associate professor of economics at the University of Tennessee.

C. H. Hardesty has been added to the staff of the Department of Economics and Commerce, University of Louisville.

Robert D. Haun, who has served as price executive with the OPA at Louisville, Ky., has returned to his duties as professor of accounting at the University of Kentucky.

Langston T. Hawley has returned as associate professor of management in the School of Commerce and Business Administration, University of Alabama. He served with the OPA in the early part of the war emergency and later with the Navy.

H. G. Hendricks has been appointed associate professor of economics at North Carolina State College.

William T. Hicks, formerly with the U. S. Department of Agriculture, has been appointed professor of marketing and director of the Bureau of Business Research, College of Business Administration, University of Georgia.

William R. Higgs has been appointed instructor in marketing in the School of Commerce and Business Administration, University of Alabama.

Martha Hill of Wesleyan College has accepted a position as instructor in secretarial science at the University of Chattanooga.

E. Byron Hilley is instructor in business law in the School of Business Administration, Emory University.

Ralph C. Hon has resumed his position at Southwestern as professor of economics and business administration. He has been on leave for the past few years, first as visiting professor at Duke University, and later in government work.

Alma Vaughn Hynes has been appointed instructor in marketing in the School of Commerce and Business Administration at the University of Alabama.

H. Brooks James, associate professor of agricultural economics at North Carolina State College, is on leave to complete work for his doctorate at Duke University.

William E. Jennings has been appointed associate professor of secretarial studies in the College of Business Administration, University of Georgia.

L. K. Johnson has been promoted to associate professor of commerce and business administration at Washington and Lee University.

W. Ross Junkin has resigned his position as associate professor of economics and business administration at Southwestern to enter government work.

T. A. Kelly has been appointed instructor in the Department of Economics and Business Administration at Vanderbilt University.

Walter Knight has been added to the staff of the Department of Economics and Commerce, University of Louisville.

Clarence E. Kuhlman, who served in the Navy several years, has accepted the position of associate professor of economics at the University of Mississippi.

George Lafferty has been appointed associate professor of accounting in the School of Commerce and Business Administration, University of Alabama. He was formerly examiner for the state of Texas and recently returned from service in the Navy.

E. M. Lander has returned from service in the armed forces to Clemson Agricultural College and has been promoted to assistant professor of economics.

Martha Latimer, director of women's activities, University of Georgia, has also been appointed part-time instructor in economics.

George E. Lent is serving as acting associate professor of economics at the University of North Carolina.

J. L. Lyons has been appointed associate professor of economics at North Carolina State College.

James W. Martin, director of the University of Kentucky Bureau of Business Research, worked last summer and continues part-time with the Virginia Interim Public Service Tax Study Committee.

Joe Logan Massie has been appointed instructor in the College of Commerce, University of Kentucky.

Lawrence P. McGrath has been appointed associate professor of finance in the College of Business Administration, University of Georgia.

Francis E. McVay, agricultural statistician with the Bureau of Agricultural Economics, U. S. Department of Agriculture, has been appointed assistant professor of agricultural economics at North Carolina State College. He will continue half-time work with the Statistical Research Office of Agricultural Estimates, BAE, in Raleigh.

F. Byers Miller, associate professor of applied economics, has been appointed acting dean of the Evening School of Business Administration at the University of Richmond.

George M. Modlin, formerly chairman of the Department of Economics and Applied Economics and dean of the Evening School of Business Administration, has been elected president of the University of Richmond.

Donald F. Mulvihill, assistant professor in the Department of Marketing in the School of Commerce and Business Administration, University of Alabama, has returned to his teaching duties from service in the Army.

Robert M. Musselman has been appointed lecturer in accounting at the University of Virginia.

Harold Nelson has become assistant professor of economics and commerce at the University of Chattanooga. He has been an auditor for the FHA and previously taught at Howard College.

Fred W. Noe has returned to Carson-Newman College from the armed forces and has taken over the work of the Department of Business Administration.

James J. O'Leary has been appointed associate professor of economics at Duke University. He is also director of research for the Committee on Public Debt Policy in New York City.

James M. Owen is instructor in accounting in the College of Commerce at Louisiana State University.

John P. Owen is instructor in economics in the College of Commerce at Louisiana State University.

Beulah Lea Pardue has left the University of Kentucky Bureau of Business Research staff to accept a position with the Virginia Public Service Tax Study Committee.

M. O. Phillips, professor at Washington and Lee University, taught graduate courses in economic geography at Columbia University during the summer session.

Stanley W. Phillips has been appointed assistant professor of economics at Maryville College. He was formerly connected with Montgomery, Ward and Company. More recently he was a price analyst for the OPA.

Ralph D. Pickett, who has been head of the Department of Commerce at Kansas State Teachers College, has accepted the position of professor of economics at the University of Kentucky.

Lloyd Pierce has been appointed assistant professor of economics at the University of Richmond.

Raymond B. Pinchbeck, dean at the University of Richmond, has been appointed chairman of the Public Service Tax Study Committee by Governor Tuck to study taxation of public utilities in Virginia.

Richard Powers, formerly instructor at the University of Virginia, has become associate professor of economics at Clemson Agricultural College.

Porter Raley has accepted a position on the research staff of the University of Kentucky Bureau of Business Research.

E. G. Rasmussen has returned to his teaching duties at Vanderbilt University after a leave of absence of three years. During this leave he held a position with the Department of State of the U. S. Foreign Legation, American Embassy in Bern, Switzerland.

B. U. Ratchford, professor of economics at Duke University, has been awarded the Medal of Freedom by the War Department for his work on German reparations while serving as economic adviser for Level of Industry with the Office of Military Government for Germany.

Karl T. Regnolds has been appointed assistant professor of economics and commerce at the University of Chattanooga.

William G. Robert, formerly associated with the U. S. Department of Agriculture, has been appointed assistant professor of economics at North Carolina State College.

M. Weley Roper has been appointed professor of sociology and economics at Tusculum College.

William D. Ross has been appointed instructor of economics at Duke University. He recently served as economist with the Economics Division of the Office of Military Government for Germany in Berlin.

Lloyd Saville, formerly price analyst with the OPA, has been appointed assistant professor of economics at Duke University.

Charles G. Siefkin, formerly associate professor of political science at Southwestern, has accepted a professorship at Emory University. He served with the armed forces abroad and was head of the Economics Branch, Shrivenham American University in England.

Lloyd A. Sifford has been added to the staff of the School of Business Administration at Emory University.

Samuel A. Silver, formerly with the federal government, has been appointed instructor in economics in the College of Business Administration, University of Georgia.

Howard R. Smith, formerly with the U. S. Bureau of the Budget, has been appointed associate professor of economics in the College of Business Administration, University of Georgia.

Winifred Snow, who served in the WAVES during the war, has been appointed instructor in marketing in the School of Commerce and Business Administration, University of Alabama.

Joseph J. Spengler, professor of economics at Duke University, gave a lecture

May 29, 1946, on "Evolution in American Economics" at Princeton University in the American Civilization Series.

Benjamin P. Spiro has been appointed assistant professor of economics at Duke University. He was formerly legal adviser to the Special Division of the Legation of Switzerland in Washington, and more recently he was connected with the Foreign Trade Information Department of the Irving Trust Company in New York.

William H. Stead resigned as director of the Institute of Research and Training in the Social Sciences and head of the Department of Economics and Business Administration at Vanderbilt University to accept a position as vice president of the Federal Reserve Bank of St. Louis.

James H. Stewart of Elon College has become assistant professor of economics at Washington and Lee University.

George W. Stocking, formerly professor of economics at the University of Texas, has been appointed director of the Institute of Research and Training in the Social Sciences and head of the Department of Economics and Business Administration at Vanderbilt University.

Glenn T. Sutton, professor of finance in the College of Business Administration, University of Georgia, has been granted leave of absence to become director of the Savannah Division of the University.

Franklyn H. Sweet has been appointed assistant professor of accounting in the School of Commerce and Business Administration, University of Alabama. He recently returned from service in the Navy, and before the war he practiced public accounting.

A. L. Taylor has been added to the staff of the Department of Economics and Commerce, University of Louisville.

Herman P. Thomas has been promoted to chairman of the Department of Economics and Applied Economics at the University of Richmond.

William Thompson has been added to the staff of the Department of Economics and Commerce, University of Louisville.

W. A. Tolman, who has served as price executive with the OPA at Atlanta, Ga., has returned to the University of Kentucky as associate professor of economics.

Bernard F. Trimpe has been appointed assistant professor of marketing at the University of Tennessee.

Brandon Trussell, formerly with Armstrong College, has been appointed assistant professor of economics in the College of Business Administration, University of Georgia.

R. H. Tucker has resigned his position as dean of Washington and Lee University, but he is continuing as professor of economics.

Andrew C. Vaden has been appointed instructor in economics in the School of Commerce and Business Administration at the University of Alabama.

John V. Van Sickle has resigned his position at Vanderbilt University and has become head of the Department of Economics at Wabash College.

Laurence H. Walker has been appointed assistant professor of economics in the College of Business Administration, University of Georgia.

J. M. Waller has been appointed instructor in economics at the University of North Carolina.

Geneva Watkins has been appointed instructor in secretarial studies in the College of Business Administration, University of Georgia.

William Way, Jr., has been appointed associate professor of transportation at the University of Tennessee. Previously he served in the armed forces, taught at the Wharton School of Finance and Commerce of the University of Pennsylvania, and was executive assistant to the president of the North Central and St. Louis Railroad.

William H. Wesson, Jr., has been appointed instructor of economics at Duke University.

William H. Whitney has been appointed associate professor of accounting in the School of Commerce and Business Administration at the University of Alabama. Formerly he was a member of the staff of Miami University and more recently has been in government service and in private accounting practice.

Francis S. Wilder, formerly economist in the Research Division of the OPA, has been appointed visiting assistant professor of economics at Duke University.

Charles W. Williams, head of the Department of Economics and Commerce at the University of Louisville, was in Europe as OWI consultant during the summer of 1946.

G. Dowman Wilson has been added to the teaching staff of the School of Business Administration at Emory University.

C. R. Youngblood has been appointed assistant professor of economics in the College of Business Administration, University of Georgia.

Ralph W. Yuill is acting assistant professor of economics at the University of Mississippi.

The following names have been added to the membership of the Southern Economic Association:

L. J. Arrington, 754 North 5th, East Logan, Utah
Buford Brandis, Emory University, Ga.
Richard P. Calhoon, University of North Carolina, Chapel Hill, N. C.
Furman E. Cannon, University of South Carolina, Columbia, S. C.
H. E. Dennison, Georgia School of Technology, Atlanta, Ga.

E. W. Eckard, University of Arkansas, Fayetteville, Ark.
Donald C. Fuller, Georgia State College for Women, Milledgeville, Ga.
John L. Fulmer, University of Virginia, Charlottesville, Va.
Vann Groover, Citizens and Southern National Bank, Atlanta, Ga.
Mathilde Hardaway, Woman's College, University of North Carolina, Greensboro, N. C.
J. M. Hedrick, Box 433, Blacksburg, Va.
E. N. Hooker, Tuskegee Institute, Ala.
Giles A. Hubert, Fisk University, Nashville, Tenn.
Thomas A. Kelly, Vanderbilt University, Nashville, Tenn.
Thomas W. Lelievre, Howard College, Birmingham, Ala.
Homer C. Lewis, Georgetown College, Georgetown, Ky.
George W. McKinney, Jr., White Hall, Va.
Frank T. Meeks, University of South Carolina, Columbia, S. C.
F. Byers Miller, University of Richmond, Richmond, Va.
J. R. D. Otis, Tuskegee Institute, Ala.
George W. Patton, Alabama Polytechnic Institute, Auburn, Ala.
Raymond B. Pinchbeck, University of Richmond, Richmond, Va.
Francis S. Scott, Box 1867, University Station, Austin 12, Texas
Ewing P. Shahan, Vanderbilt University, Nashville, Tenn.
George W. Snowden, Dillard University, New Orleans, La.
William Way, Jr., University of Tennessee, Knoxville, Tenn.

NOTES

SOUTHERN ECONOMIC ASSOCIATION

RECEIPTS AND EXPENDITURES FOR THE FISCAL YEAR ENDED OCTOBER 31, 1946

November 1, 1945, Cash on Hand		$602.06
RECEIPTS:		
Annual Memberships	$714.00	
Institutional Memberships	20.00	
Dividends on Investments	13.29	747.29
		$1,349.35
EXPENDITURES:		
Stamps	$55.40	
Printing and Supplies	40.70	
Telephone	1.23	
Travel	36.65	
Miscellaneous	41.89	
Dividends Reinvested	13.29	
The Southern Economic Journal	482.00	671.16
Cash on Hand, October 31, 1946		678.19
		$1,349.35

Fund Balance as of October 31, 1946	
Cash on Hand	$678.19
Investments	542.03
Total	$1,220.22
Investment Account	
Total Investments as of October 31, 1945, Fort Hill Savings and Loan Association	$528.74
January 2—Dividends for July–December, 1945, Reinvested	6.60
July 2—Dividends for January–June, 1946, Reinvested	6.69
Total Investments as of October 31, 1946	$542.03

JAMES E. WARD,
Treasurer.

FINANCIAL STATEMENT OF THE SOUTHERN ECONOMIC JOURNAL FOR THE FISCAL YEAR ENDING OCTOBER 31,1946

Cash Balance, November 1, 1945			$2,383.62
INCOME:			
Grants:			
University of North Carolina	$500.00		
Woman's College, University of North Carolina	250.00		
Grant Receivable (N. C. State College)	250.00		
Total Grants		$1,000.00	
Annual Membership Fees		476.00	
Institutional Membership Fees		6.00	
Subscriptions		708.00	

Advertising:				
Receivables Preceding Year Collected		61.25		
Current Year	$288.75			
Less Refund	5.00			
Total Current Year		283.75		
Receivables Current Year		81.25		
Total Advertising			426.25	
Miscellaneous Sales			72.50	
Total Income				2,688.75
Total Cash Balance and Income				5,072.37
EXPENSES:				
Supplies and Materials			14.50	
Postage, Telephone and Telegraph			115.03	
Printing the Journal				
October 1945 Issue		502.09		
Reprints October 1945 Issue		16.36		
Paid for Current Year (January, April and July Issues)		1,548.75		
Total Printing			2,067.20	
Other Printing			5.50	
General Expense			285.21	
Total Expenses				2,487.44
Balance, October 31, 1946				$2,584.93*
Balance Represented by:				
Cash			2,253.68	
Accounts Receivable			331.25	
Total				$2,584.93*

* Balance subject to printing and clerical expense still to be paid for October 1946 issue. Amount was not ascertainable at close of fiscal year.

D. D. CARROLL,
Acting Managing Editor.

BOOKS RECEIVED

Development of the Reconversion Policies of the War Production Board, April 1943 to January 1945. Washington: Historical Reports on War Administration, War Production Board, Special Study 15, March 1946. Pp. 181.

Hide and Leather Policies of the War Production Board and Predecessor Agencies, May 1940 to December 1943. Washington: Historical Reports on War Administration, War Production Board, Special Study 5, August 1946. Pp. 100.

Taxation and Fiscal Policy. Report No. 7 of the Social and Economic Planning Council. Pretoria, South Africa; 1945. Pp. 74.

Retail Trade Areas in Illinois. By P. D. Converse. Business Studies No. 4. Urbana, Illinois: University of Illinois, 1946. Pp. 31.

Cost Accounting Principles and Practice. By James L. Dohr and Howell A. Ingrahm. New York: Ronald Press Co., 1946. Pp. x, 752. $5.00.

Russian American Trade. By Mikhail V. Condoide. Columbus, Ohio: Bureau of Business Research, Ohio State University, 1946. Pp. xiii, 160.

Educating for Industry Thru Apprenticeship. By William F. Patterson and Marion H. Hedges. New York: Prentice-Hall, 1946. Pp. ix, 229. $2.50.

Principles of Economics. By Ralph H. Blodgett. New York: Rinehart & Co., 1946. Pp. xvi, 668. $4.00.

New Farm Homes for Old. A Study of Rural Public Housing in the South. By Rupert B. Vance and Gordon W. Blackwell. University, Alabama: University of Alabama Press, 1946. Pp. 245. $3.00.

The Fiscal Impact of Federalism in the United States. By James A. Maxwell. Cambridge, Mass.: Harvard University Press, 1946. Pp. xvii, 427. $5.00.

Readings in the Theory of Income Distribution. Selected by a Committee of The American Economic Association. Philadelphia: Blakiston Co., 1946. Pp. xvi, 718. $4.25.

Management of the Federal Debt. By Charles C. Abbott. New York: The McGraw-Hill Book Co., 1946. Pp. ix, 194. $2.50.

For This We Fought. By Stuart Chase. New York: Twentieth Century Fund, 1946. Pp. x, 123. $1.00.

Industrial and Commercial Geography. 3rd Edition. By J. Russell Smith and M. Ogden Phillips. New York: Henry Holt and Co., 1946. Pp. xiii, 978. $4.90.

Elements of Economics. By Edmund Whittaker. New York: Longmans, Green and Co., 1946. Pp. xvii, 393. $3.50.

Executive Ability. By Glen U. Cleeton and Charles W. Mason. Yellow Springs, Ohio: Antioch Press, 1946. Pp. 540. $4.50.

Business Organization and Combination. 3rd Edition. By Richard Norman Owens. New York: Prentice-Hall, 1946. Pp. xiii, 567. $6.00.

The Finances of European Liberation. By Frank A. Southard, Jr. New York: Columbia University Press, 1946. Pp. ix, 206. $3.00.

Radio Is Yours. By Jerome H. Spingarn. Public Affairs Pamphlet No. 121. New York: Public Affairs Committee, 1946. Pp. 31. 10¢.

A System of National Bookkeeping. By J. B. D. Derksen. New York: Macmillan Company, 1946. Pp. 34. $1.25.

Minutes of the Advisory Commission to the Council of National Defense. Washington: U. S. Government Printing Office, 1946. Pp. vi, 181.

Minutes of the Council of the Office of Production Management. Washington: U. S. Government Printing Office, 1946. Pp. v, 102.

Minutes of the Planning Committee of the War Production Board. Washington: U. S. Government Printing Office, 1946. Pp. vi, 180.

Minutes of the Supply Priorities and Allocations Board. Washington: U. S. Government Printing Office, 1946. Pp. iv, 75.

Minutes of the War Production Board. Washington: U. S. Government Printing Office, 1946. Pp. vi, 457.

THE SOUTHERN ECONOMIC ASSOCIATION

Membership dues in the Association are: annual \$3.00, sustaining \$5.00, contributing \$10.00, life \$60.00, institutional \$10.00. Membership fees include \$2.00 in payment for a year's subscription to the *Southern Economic Journal* at the special rate granted to members of the Southern Economic Association.

Applications for membership should be addressed to James E. Ward, Clemson College, Clemson, South Carolina.